

ORISSA VISION 2010

A HEALTH STRATEGY



Orissa State Integrated Health Policy,
Strategies and Action Points

February 2003

Health and Family Welfare Department
Government of Orissa
Bhubaneswar

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GLOSSARY

ADMO (PH)	Assistant District Medical Officer (Public Health)
AIDS	Acquired Immunodeficiency Syndrome
ANC	Ante Natal Care
ANM	Auxiliary Nurse Midwife
ARV	Anti Rabies Vaccine
AWW	Anganwadi Worker
BEOC	Basic Emergency Obstetric Care
BMW	Bio Medical Waste
CDMO	Chief District Medical Officer
CEOC	Comprehensive Emergency Obstetric Care
CHC	Community Health Centre
CME	Continuing Medical Education
CPR	Contraceptive Prevalence Rate / Couple Protection Rate
D & C Rules	Drugs and Cosmetics Rules
DCG	Drug Controller General
DDC	Drug Distribution Centre
DFID	Department For International Development (United Kingdom)
DIMIS	Drug Inventory Management Information Systems
DMET	Director of Medical Education and Training
EDL	Essential Drug List
EOC	Emergency Obstetric Care
FLE	Family Life Education
FP	Family Planning
FRU	First Referral Unit
GMP	Good Manufacturing Practice
GOI	Government of India
GoO	Government of Orissa
GSDP	Gross State Domestic Product
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HRD	Human Resource Development
IAP	Indian Association of Paediatricians
ICDS	Integrated Child Development Scheme
ICMR	Indian Council of Medical Research
ICPD	International Conference on Population and Development
IEC	Information, Education and Communication
IMA	Indian Medical Association
IMR	Infant Mortality Rate
IQ	Intelligence Quotient
ISDN	Integrated Services Digital Network
ISM & H	Indian Systems of Medicine and Homeopathy
LBW	Low Birth Weight
MCI	Medical Council of India
MDSS	Multi Disease Surveillance System
MIS	Management Information System
MMR	Maternal Mortality Ratio
MO	Medical Officer
MOHFW	Ministry of Health and Family Welfare
MPHS (M)	Multi-purpose health supervisor – Male
MTP	Medical Termination of Pregnancy

NFHS	National Family Health Survey
NGOs	Non Governmental Organizations
NPP	National Population Policy
NSQ	Not of Standard Quality
NSSO	National Sample Survey Organization
OFA	Obstetric First Aid
OHFWRP	Orissa Health and Family Welfare Reform Project
OHSDP	Orissa Health Systems Development Project
OOP	Out of Pocket (expenditure)
OPD	Out Patient Department
OVHA	Orissa Voluntary Health Association
PFA Act	Prevention of Food Adulteration Act
PG	Post Graduate
PHC	Primary Health Centre
PHC	Primary Health Care
PHC (N)	Primary Health Centre (New)
PF	Plasmodium Falciparum
PLA	Participatory Learning Exercise
PMU	Project Management Unit
PRI	Panchayati Raj Institution
PSPU	Policy and Strategic Planning Unit
PT	Presumptive Treatment
PWD	Public Works Department
R & D	Research and Development
RCH	Reproductive and Child Health
RDD	Rural Development Department
RTI	Reproductive Tract Infection
RWSS	Rural Water Supply and Sanitation
SDMU	State Drug Management Unit
SDPHC	Sector (Single Doctor) Primary Health Centre
SDTRL	State Drug Testing and Research Laboratory
SHG	Self Help Group
SIHFW	State Institute of Health and Family Welfare
SRS	Sample Registration Scheme
STD	Sexually Transmitted Disease
STG	Standard Treatment Guidelines
STI	Sexually Transmitted Infection
TB	Tuberculosis
TBA	Traditional Birth Attendant
TFA	Target Free Approach
TT	Tetanus Toxoid
UG	Undergraduate
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
W & CD	Women and Child Development
WHO	World Health Organization
WMT	Waste Management Team
ZSS	Zilla Swasthya Samitee

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CHAPTER ONE

INTRODUCTION

The Vision 2010 for the Health Sector conceptualized by the Government of Orissa in February 2001 has been taken forward to the formulation of a health policy, strategies and proposed activities in key areas. This was accomplished through an elaborate consultative process, backed up by documented experience and studies. The health sector strategy presents the plans, priorities and broad steps for action by the Government of Orissa to all concerned partners. Translating these strategies into medium term action plans with clearly defined interim targets, and developing cost budgets for the first year action plan will form the next step. This will be done in the next few months. An institutional arrangement to take the action forward, integrating the existing and new functions of the Health and Family Welfare Department will be put in place. A taskforce will be constituted to lead the business, and the think tank, the Policy and Strategic Planning Unit, will be reorganized and regrouped to support the process.

The Government of Orissa recognizes that investing in health results in invaluable gains in human development. It has as its goal the improvement of health of its people and equitable access to good quality health care.

Many determinants of health such as nutrition, water supply and sanitation are not directly within the realm of health care services. However, other services with health effects are addressed to a certain extent through an inter-sectoral approach, highlighting the specific role of the department of health with the State taking the role of collective mediator. The strategy uses the primary health care approach and public health principles for priority health problems. It gives prime importance to health systems management issues building on its own recent experience in reforms. Human resource development and management with good governance and accountability are recognized as critical areas. Greater effort will be put into health care financing, financial management and accounting systems. Building partnerships will be a thrust area with greater scope and capacity building for community involvement and closer linkages with NGOs, civil society, the private sector and donors to meet shared social goals. Special attention will be paid to the poor and vulnerable sections of society.

Despite financial constraints, the Government of Orissa will continue its effort to systematically enhance its investment in health. It is also actively seeking alternative and additional sources of support to strengthening its health system. The State is confident that these efforts will make a positive contribution to the lives of its citizens.

CHAPTER TWO

OVERVIEW OF ORISSA HEALTH SECTOR REFORM

Context

Despite gradual improvement in health status over many years, preventable mortality and morbidity in Orissa are high. The root causes of poor health continue to be poverty, social deprivation, lower levels of literacy, inefficient health systems and infrastructure for health care and control of diseases, particularly communicable diseases. Socio-cultural inequities and barriers, insufficient assertion and demand for health care, inadequate geographic spread of service outlets and poor quality health care reduce access to and effectiveness of public services. Women, children and tribal people are the worst affected.

The Beginning of the Current Reform Initiatives

In 1996, following public debate and dissatisfaction with the health services, the House Committee of the Orissa Legislative Assembly paved the way for a health sector reform agenda, with three major recommendations:

- a) The need for additional resource mobilization for the health sector;
- b) The need for sustained effort towards autonomy for health institutions;
- c) The need for abolishing private practice of Government physicians.

This was the time when DFID, in partnership with GoO, had concluded a strategic review of the Orissa health sector, as well as an investigation of the impact of health project inputs of the previous ten years. Major observations pointed to the following:

- Utilization of health infrastructure by the needy was less than adequate;
- Asset maintenance was far from satisfactory;
- In-service training did not bridge the skill-gaps of service providers;
- Primary health care services were beset with major but removable constraints.

The Government initiated investigations in priority areas based on the above findings and recommendations. Studies on burden of disease, beneficiary social assessment and cost of services provided were among them. The health financing level, which was constant but low over the years was understandably the major deterrent for any sweeping reform initiative. A sudden and substantial increase in the health budget remained ill affordable.

However, the GoO decided to go ahead.

The Steps Taken

1. One of the first efforts towards reform was to mobilize local resources through introduction of user charges in tertiary and secondary hospitals with a built-in

exemption plan for the poor. The result was encouraging. User charges helped hospitals secure working capital for day-to-day miscellaneous needs, and provided more autonomy to hospitals for financial decision-making (fixing rates, collection and spending). Social impact, service utilization patterns and cost effectiveness will need further evaluation.

2. Efforts at **decentralization** started side by side. The district health societies or *Zilla Swasthya Samitees* (ZSS) were revamped, with merger of parallel societies at district level to improve efficiency and coordination. Performance of different districts varied considerably, but further inputs were planned to make the ZSS an enabling health management structure at the district level, while retaining the role of the state for overall health planning, guidance and supervision.
3. There were efforts towards partnerships and outsourcing. On a pilot basis the Government transferred the **management responsibility of selected PHCs to private-not-for-profit agencies (NGOs)**. This was later evaluated and found not very successful. The terms of reference and modalities of the transfer were insufficient and very few organizations had the capacity to run or sustain the comprehensive services provided through PHCs. The findings however helped in capturing important lessons that feed into the Government's proposed policy of transfer of management to peripheral levels. Another effort at outsourcing was the **handing over cleaning services to private agencies** in major hospitals. Aimed at improving efficiency of ancillary services in hospitals, this initiative was found to have a notable effect on hospital cleanliness, and has resulted in better user satisfaction.
4. Existing **personnel policies** and practices were not properly addressing the HRD function. Employee morale and motivation were low, and lack of job satisfaction affected the quality of service. Frequent transfers and large number of vacant positions of doctors and other health personnel complicated the scenario. A few initiatives introduced in this direction were:
 - **Para-medical cadres** were converted from state to district cadres. Transfers became less frequent and limited within the district of choice of the employee.
 - **Multi-skilling of pharmacists** through training as laboratory technicians for TB and Malaria programmes.
 - **Short training course** for general doctors in anaesthesia administration.
 - **Change in internship training programme** towards greater community health orientation.
 - **Rural service incentives** to doctors (cash allowance in remote districts, weight age for postgraduate course entrance).
 - **Increased travel expenses** for all ANMs for job-related travel.
 - **Mandatory pre-postgraduate service** in remote districts. This helped in filling a large number of vacancies of doctors in remote primary health centres.
 - Orissa Medical Service rules were amended to make the **first posting to rural areas mandatory**.

5. Drug shortages were widespread in all health institutions and drug budgets did not increase with increasing need. Realizing that this was the most tangible aspect of user satisfaction and a poverty reduction measure from the health service delivery point of view, the Government introduced reform in the form of a **new policy for drug procurement and distribution**. The result was encouraging. The hospitals got more autonomy in indenting required drugs within the prescribed essential drug list using generic names. Rational reallocation of funds, bulk procurement and stringent quality checks resulted in better quality medicines in larger quantities for the same budget. An external evaluation of the scheme gave a very positive report.
6. Another reform introduced was to ensure **total risk protection against five selected diseases** that used to drain large amounts of family income all over Orissa. Treatment for these diseases was made absolutely free for all through government health institutions, and any private expenditure incurred was made reimbursable from the Zilla Swasthya Samitees (ZSS) or hospital societies.
7. **Campaign approach for vitamin A coverage** among children was introduced in the state on the lines of polio campaign for comprehensive protection of children against vitamin A deficiency. This is changed after the recent Government of India guideline.
8. **Building and other asset maintenance** suffered from serious lack of funds and inadequate systems for cost-effective maintenance management. The Government adopted a policy for the maintenance system to become more effective and responsive to needs within available resources. As a first step, **petty and contingency maintenance was made the responsibility of the medical managers of CHCs** by providing them a particular amount every year with flexible guidelines for easy operations. This was evaluated, and corrective measures for better policy implementation were undertaken. The Government also decided to attempt **cost effective building technologies** wherever possible, that would further reduce the maintenance costs. A **maintenance management information system** is slowly being built up. A **built asset database** to rationally assess the maintenance needs and budget, to negotiate an increased maintenance budget is also being developed.
9. Routine financial systems provided little scope for managers at different levels to initiate a timely response to financial needs of projects, programmes and specific activities. Delays often resulted in non-achievement of results. As a policy, the Government decided that fund flow for various activities would be facilitated and simplified through State and District health societies. The Government encouraged **channeling of funds from the GOI and other donors through the state society and the Zilla Swasthya Samitee** to the spending centres.

10. **The Vision for 2010** was articulated in February 2001 and presented for discussion at the Puri workshop.

Major components of the Vision Statement are:

- Substantial reduction in communicable disease burden.
- Effective control of non-communicable diseases.
- Risk protection against major communicable diseases, injuries, all ailments of women and children, with particular reference to conditions associated with pregnancy and childbirth. This will be achieved through a mix of service and financing options.
- Better distribution of public provided services with equity and geographic access.
- Partnership with private providers in comprehensive health care delivery through an effective balance of facilitation and regulation.
- Professional hospital management with greater autonomy. Service provision would instill reassurance and confidence in the nature and quality of service. Issues to be addressed are quality, personnel skill upgradation, staff motivation, incentives, supervision, better management, mechanisms for autonomy, more funds, differential charging of services, maintenance, equipment and other tools of trade, medicine, adequate built space, staff quarters, medical audit, pay wards, risk pooled local community based insurance schemes, rotation posting of doctors to and from medical colleges, pay clinics, community participation in hospital management, fair-priced drug outlets, blood banks, diagnostic facilities, better laboratories, decision support information systems, computerized case records, better referral systems, privatization of most support services, rational staff-patient ratio.
- Health service market failure issues would be addressed through the following actions:
 - a) The public would be better informed about the nature and type of services available at publicly provided institutions.
 - b) A mix of financing options would be tested and the most suitable method mix chosen, based on results of internal experiments and lessons learned from elsewhere. This would include community financing, social health insurance and government financing.
 - c) Allied health and para-medical professionals would be made available according to need with enhanced production through increased training seats in academic institutions. Contracting of service personnel would be encouraged where regular government positions are not necessary.
- There will be a state health manpower policy and human resource development strategy that would effectively address issues of health professional supply and demand.
- Community involvement in health service delivery will become more meaningful through performance audit by the user community, hospital development forums, built-in user feedback systems etc.

- Family Welfare services will be of good quality and more responsive to needs of the public, with charges at cost price for people above a particular income level.
- Diseases like polio, measles, neo-natal tetanus, yaws, and blindness due to vitamin A deficiency will be eradicated.
- State-of-the-art treatment facilities that are relevant and affordable will be made available for non-communicable diseases, including cancer, at a cost, with some form of insurance cover or exemption for poor patients.
- Medical and health administration will be improved through suitable policy changes.

It was decided to develop:

1. A comprehensive health and family welfare policy statement for Orissa to address issues mentioned in the Vision 2010 document, and to incrementally achieve the objectives of the National Population Policy.
2. A medium term strategy for development of health services.

CHAPTER THREE

THE HEALTH STRATEGY DEVELOPMENT PROCESS

The Health and Family Welfare Department, Government of Orissa, under the guidance of the Principal Secretary led the process of developing the medium term health strategy. Due to an enabling continuity in leadership, partnership and teamwork over the past six years the strategy document built organically on the departmental reform or change processes that have taken place.

The Orissa Vision 2010 for Health was articulated in February 2001, outlining strategic components. The strategy framework slowly evolved from August 2001 in a highly participatory approach through several meetings, state and district level workshops. The department also secured the guidance of two consultants from the Institute for Health Systems Development, UK under a DFID contract. Further work was through internal efforts. Persons were identified to write different chapters.

From February 2002, these papers were discussed, critiqued, rewritten and re-presented at twenty seven weekly / twice weekly meetings till May 2002, all chaired by the Principal Secretary, Health. Participants included twenty-nine government personnel, twenty-one persons from related organizations (DFID, WHO, UNICEF, OHSDP, UNFPA, ECTA, etc) and twelve persons from the PMU and PSPU. Stakeholder workshops to elicit feedback regarding the strategy were held in two districts, Kalahandi and Khurda, with elected representatives, NGOs, self-help group members, media and government functionaries from departments of Health, Women and Child Development, Education and Rural Development.

The broader ownership of the strategy development process is expected to flow into the implementation phase, which is an integral part of the cyclical health policy, strategy and service delivery cum care continuum.

The strategy document builds on work already initiated, such as the IMR Reduction Mission, drug policy related interventions, the multi-disease surveillance system and the Panchabyadhi Chikitsa scheme. It takes further the work in Bhadrak and Keonjhar districts regarding maintenance of built assets and equipment, a rational approach to provider mobility support and community participation. A large number of studies including those on health financing provided necessary evidence and direction for strategy development. The Tenth Plan Approach Paper, and work in other states such as Maharashtra, West Bengal, Andhra Pradesh and Karnataka were taken note of. The health sector strategy development formed part of the broader reform process taking place in the state.

In June 2002, the Community Health Cell, Bangalore was contracted to compile the disparate inputs into a unified draft document. At that stage, meetings were also held with the Chief Minister, the Minister of State for Health, the Chief Secretary, Development

Commissioner and Secretaries of Finance and Women and Child Development. This was to reinforce the need for policy and financial commitments by the State to the health sector as an investment in the human development of people. A four-member team from Orissa also visited Bangalore in end June for discussions on the papers and a meeting with the Karnataka Task Force on Health and Family Welfare.

The key assumptions underlying the strategy include: a continuity with the strong collective leadership of the past few years; active involvement of implementers; civic society and community participation in a meaningful way supported by a think tank such as the PSPU; commitment of finances and human resources by the state; mobilization of additional resources (financial and technical) for health; strengthened administration and management; prioritization and costing of strategies; identification of nodal officers or agencies responsible for each strategy; the setting of time frames; identification of health outcomes and indicators: and most importantly, the State acting as a 'collective mediator' for better health of its people.

Risks include frequent change of leadership at level of the directorate or the strategic units; mismatch between skills and experience required and persons appointed to key posts; inadequate communication of the department's mission and strategies to different levels; excess focus on medical care rather than on public health and primary health care; apathy on the part of providers; the expected short fall of doctors in the next two years; and lack of focus on performance and outcomes. These aspects will be monitored on a regular basis through institutional mechanisms (taskforce and review committees), and corrective steps would be put in place as appropriate.

CHAPTER FOUR

ORISSA STATE INTEGRATED HEALTH POLICY – 2002

ORISSA STATE INTEGRATED HEALTH POLICY - 2002

1. Introduction

- 1.1 Through a planned process since 1947, there has been an expansion in infrastructure and systems for providing health care services throughout Orissa. Orissa has adopted Central Government norms, guidelines, policies and programmes for this development.
- 1.2 In recent years, there have been a number of additional statewide initiatives to enhance the reach and quality of health care to improve the health of people. These include the multi disease surveillance system; several measures towards streamlining drug procurement, distribution and rational use of drugs; total risk coverage for five major communicable diseases through the *Panchabyadhi Chikitsa Scheme*; the Infant Mortality Rate Reduction Mission; mandatory pre-post graduate placement of doctors to serve in difficult areas; establishment of district cadres for paramedical staff, among others. It is a matter of pride that in several of these areas Orissa has been a pioneer and positive results are seen. District level initiatives have piloted important components of primary health care such as community participation, improved mobility assistance for field staff, support to training and health education systems, maintenance of built assets and equipment, use of low cost construction for primary health centres and sub-centres. All these have led to improved capacity and confidence of health service providers and improved health care. The Policy and Strategic Planning Unit (PSPU) has initiated work on policy areas including health financing. These involvements have led the State Health and Family Welfare Department to develop a Vision for 2010 and to this policy statement.
- 1.3 Since the year 1947, there has been a gradual improvement in the health status of the population due to several factors including developmental and educational interventions, economic improvement and better health care services. While the Infant Mortality Rate (IMR) has declined from 135 in 1981 to 97 in 1989, it is still one of the highest in India – much above the national average of 70. The Crude Death Rate (CDR) has declined from 15.4 per 1000 population in 1971 to 13.1 in 1981 and 10.6 in 1999. Rural urban differences remain (for 1999 rural, IMR-100, urban IMR – 65; rural CDR 11.1, urban CDR 7.1). The Crude Birth Rate (CBR) has declined substantially from 34.6 per 1000 population in 1971 to 33.1 in 1981 and 24.1 in 1999 (rural 24.6, urban 20.3, all India 26.1). The gender ratio (females per 1000 males) is 972 in 2001, which has increased from 971 in 1991 and is higher than the all India level of 933 in 2001. Orissa is on its way to achieving population stabilization with an annual growth rate of 1.59% (2001 census), against the all India figure of 2.13%. The life expectancy for 1996-2001 is projected as 58.5 years for males and 58.1 years for females, up from 54.1 and 51.9 years for males and females respectively in 1981-86. Indicators of nutritional status among women and children and burden of diseases indicate a substantial proportion of preventable morbidity and mortality. The people of

Orissa experience a large number of disasters – about 40 major disasters in 50 years – that adversely affect health and development and health care services.

- 1.4 It is in this context that an integrated health policy statement is being articulated for the comprehensive, planned development of the entire health sector (public, voluntary, private; allopathic and Indian systems of medicine as well as homeopathy); and to address key determinants of health (nutrition, water supply, sanitation, environmental hazards); in order to improve the health of people and their access to care. This state health policy draws upon the National Health Policy 1983 and 2002. Central policies regarding specific health related issues, such as education for health sciences (1989), nutrition (1993), drug policy (1988 and 1994), pharmaceutical policy (2001), Medical Council of India guidelines (1997), blood banking (1997), the elderly (1998), Population Policy (2000) and others continue to be the guiding documents. The Orissa State Integrated Health Policy developed by the Health and Family Welfare Department, Government of Orissa, indicates directions for health improvement in a state-specific context, as health is a State subject under the Constitutional framework of India. It helps to actualise the Vision Statement for 2010 by providing a framework within which strategies and operational plans are developed, implemented and reviewed.

2. Mission Statement

The Mission of the Health and Family Welfare Department, Government of Orissa, is to facilitate improvement in the health status of the people of Orissa with their participation, and to make available health care in a socially equitable, accessible and affordable manner within a reasonable timeframe, creating partnerships between the public, voluntary and private health sector and across other developmental sectors.

Medium and long-term goals are derived from the Vision 2010, and some of the specific goals are given in Section 8.

3. Approach

The various components of the approach are outlined below:

- 3.1 A participatory analytic and reflective approach will continue to be used in achieving health goals. Involvement of communities and stakeholders in decision-making, planning and implementation increases ownership and can harness creative energies and resources – human, material and financial - towards shared goals.
- 3.2 A public health and societal approach will be used to address determinants of ill health such as nutrition, water supply and sanitation, to reduce transmission of communicable diseases, and risk factors for diseases at population levels. Public health aims to protect, promote, restore and improve the health of all people through collective action.

3.3 The primary health care approach works together with public health and emphasizes principles of:

- inter-sectoral coordination at all levels, especially at the district, sub-division and village / municipal level
- community participation and social control through Panchayati Raj institutions, health committees and other institutionalized mechanisms for community feedback
- equitable distribution of good quality health care, recognizing that health is a human right and there is need for social justice in health care
- value of appropriate technology for health
- adopting an inclusive approach with equal support to local health traditions, yoga, Indian systems of medicine, and homeopathy
- referral systems and linkages between the primary, secondary and tertiary levels of health care.

3.4 Health financing, management and administration are critical support systems for the health sector. They will be developed through training, research and nurture.

3.5 The pro-poor approach: The co-relation between poverty and poor health is well known. It is not only the wage-loss during illness episodes or due to consequent disabilities that make the poor poorer, but also the sudden financial loss and debt-trap that make the situation worse for them. High out-of-pocket expenditure on treatment incurred by all sections of the community, as is evident from a variety of investigations in Orissa, leads to the conclusion that unless the State takes adequate care to protect the poor and the vulnerable from the adverse economic effects of diseases, any serious effort at sustainable socio-economic development will have no long-standing and favourable impact. At present, a very large portion of the public-provided services is consumed by the better-off than the worse-off for a variety of reasons. The policies and strategies therefore attempt to address this issue in every possible situation thereby indirectly helping in sustainable human development. Health improvement complements socio-economic development process by directly increasing human well-being and reducing economic risks and poverty. The policies and sector reform strategies contribute to health improvement by translating those strategies into actions that are cost-efficient in achieving health gains in the community, by reducing wasteful and inappropriate expenditure by the State as well as by the individual.

4. Core Components

4.1 Equity

The policy aims to reduce disparities on four parameters, namely region; disadvantaged groups (scheduled tribes and castes); gender; and vulnerable groups (persons with disability and elderly persons).

4.1.1 Region

The eleven KBK (Koraput-Bolangir-Kalahandi) plus districts have been identified for priority development inputs by the state. These districts are Kalahandi, Nuapada, Koraput, Nabarangpur, Malkangiri, Rayagada, Bolangir, Sonepur, Kandhamal (formerly Phulbani), Gajapati and Boudh. Greater human and financial investments for health sector development and functioning will be made to these districts and to disadvantaged pockets in other districts over the next eight years. Rural urban disparities in health indicators will be reduced. Resource mapping of public / private, civil society and donor inputs followed by integrated planning will help avoid wastage and duplication.

4.1.2 Scheduled Tribes and Castes

The scheduled tribe (ST) population in Orissa (22%) is larger than the national average of 8%. The scheduled caste (SC) population is 16%. Together they account for 38% of the population. Available disaggregated indicators point to a poorer health status among these deprived social groups. Under-nutrition, stunting of growth and underweight are higher among SCs, ST, and backward communities. Coverage of antenatal care is lower among deprived socio-economic groups. Geographic and other reasons have led to lower access and utilization of health care. Efforts have been made by the state on a priority basis to redress this. For indigenous people, a package of services will be made available and accessible. This would include nutrition services (education cum supplementation); communicable disease control especially malaria, TB, leprosy, yaws; services for specific diseases such as sickle cell anaemia and special norms for health services including training and induction of health workers and professionals from this social group into the state health services.

Persons of scheduled caste origin are spread throughout the state in all districts, while scheduled tribes are more concentrated in certain districts. Primary care, access to complete treatment, follow up and referrals to secondary and tertiary care hospitals at very subsidized rates will be assured. Local health traditions will be acknowledged and respected. Sensitization training is necessary for health providers to reduce negative social attitudes and to instill respect for human dignity.

4.1.3 Gender

Though Orissa's gender ratio is higher than many other Indian states, it has declined over the decades from 1037 females per 1000 males in 1901, to 971 in 1991 and increased nominally to 972 in 2001 (all India average 933 in 2001). However, in the critical 0-6 years age group it has declined from 967 to 950. This is a matter of serious concern. Implementation of the PNDDT Act (1994) and creating awareness among the public and professionals of the harmful consequences of female feticide will be undertaken. Other reports suggest that

violence against women is on the increase. Health providers will be trained to identify, record and manage such cases and initiate preventive measure through families and the community.

The NFHS 2 data indicate that women marry relatively late compared to other states and the small family norm is more accepted. However only 39% are involved in decision-making about their own health care, and only 29% who earn cash can decide independently how to spend the money they earn.

NFHS 2 also reports that based on a weight for height index 48 per cent of women in Orissa are undernourished, with serious nutritional deficits among women in rural areas and disadvantaged socio-economic groups. Prevalence of some degree of anaemia occurs in 63 per cent of women. Over 28 per cent of currently married women reported some type of reproductive health problem.

Therefore, highest priority will be given to improve women's health status and access to care. The number of women doctors and female health workers at primary care level will be increased with provision of residential facilities and personal security. Linkages with the voluntary and private sector will be encouraged. ICDS functionaries also play a critical role and their capacity will be strengthened through training. Empowerment training of women's groups for better health seeking practices will be supported. Life skills education for adolescent girls and boys will be developed in collaboration with the Department of Education.

4.1.4 Vulnerable groups

Innovative and collaborative efforts will be made to meet the health needs of persons with disability, the elderly, street children, out of school and working children, prisoners and commercial sex workers. The state will be open to learning from other parts of the country especially of participatory approaches. Resource generation from a variety of sources such as voluntary agencies, philanthropists, private sector, and the local community will be encouraged.

In summary, efforts to achieve equity for the four broad groupings above will cut across all health sector strategies in order to improve social, cultural and physical access to health care.

4.2 Quality of Care

Concurrent with the improvement of health care infrastructure, the focus during the coming five years will be to enhance quality of care and patient satisfaction. The State will set clearly defined standards of care for each level of health institution. Quality assurance mechanisms and certification will be established covering the public, voluntary and private sector. It will include accreditation, repeat registration, mandatory continuing education for all health care personnel, patient's charters,

grievance redress systems and legal measures. Service product offer and the quality of service delivery will be suitably tailored to increase public awareness, confidence and service consumption. An important element towards achieving this would be to train the service givers. Good governance of the large public funded health system, by internal institutional mechanisms and through elected representatives, local bodies and civil society groups needs greater attention in order to improve quality and accountability.

4.3 Sustainability

The Health and Family Welfare Department will make efforts to:

- a) sustain the momentum of changes introduced since the 1990s;
- b) build a core group of middle level and younger multi-disciplinary health professionals;
- c) develop leadership;
- d) facilitate and be open to civil society involvement;
- e) build in financial sustainability by 2010, protecting and increasing the health budget, and increasing the range of sources of funding;
- f) continue with human resource development and personnel planning to ensure retention of a core group of highly trained and motivated staff.

4.4 Medical and Public Health Ethics

In order to protect public and patient interests and human rights, including the right to life, health and health care, the State, with the support of Universities, professional bodies, consumer groups and civil society, will

- a) promote the principles and practice of medical ethics in all health care institutions, and in all sectors and systems of medicine;
- b) promote the practice of public health ethics in decision making, resource allocation and implementation of policies and programmes;
- c) address and reduce the scourge of corrupt practices or extortions through better and transparent systems and building public support.

5. Organizational Components

5.1 Health Care Financing

In view of:

- a) the large proportion of out of pocket expenses as part of health expenditure and its adverse consequences on the poor;
- b) the linkages of chronic ill-health or hospitalization with indebtedness and poverty, and
- c) the rising costs of medical care

the State will take proactive initiatives in health care financing. The State Government spending will be gradually scaled up to achieve the national norms. Allocations will be protected and increased in a phased manner up to 2% of Gross Domestic Product and to

5- 6% of the budget depending upon the financial situation of the State. There will be complete utilization of Central Government grants under all the schemes. Spending will be equitably distributed:

- (i) between primary, secondary and tertiary levels at 55%, 35% and 10% as suggested by Government of India;
- (ii) between urban and rural areas, and
- (iii) between the worse off and better off districts. Indigenous systems of medicine and homeopathy will receive a better share of resources than what is available at present. Allocation and spending on health promotion will be enhanced.
- (iv) A greater consciousness about resources will be instilled among health providers and decision makers. Efforts will be made to reduce wastage and duplication through selection of cost-effective strategies and efficient management practices. Innovative financing schemes will be tried. Local needs-based planning and management will be encouraged, and financial management skills at the peripheral levels will be strengthened.

5.2 Strategic Planning

5.2.1 Strategic planning and management, based on sustained environmental scanning, creativity, innovation and new ways of looking at the organization to achieve its objectives and mission, will form the core element of the Policy. Based on the findings of organizational reviews conducted at least once in 5 years, adjustments in the structure, staffing and systems will be made to make the organization best suited and most efficient in achieving its operational goals.

5.2.2 A few areas were identified for long range planning by the Organizational Review, 2002 of the Health and Family Welfare Department, undertaken as part of the broader administrative and fiscal reform of the Government. Those identified areas will be further investigated, piloted, and appropriately implemented.

5.2.3 The Policy and Strategic Planning Unit (PSPU) will be an integral part of the Health and Family Welfare Department, and will comprise of internal and external experts. Using evidence obtained from studies undertaken or commissioned, and from analysis of HMIS and other surveillance systems data, it will provide strategic advice to the leadership. The unit will have a multidisciplinary team comprising of public health specialists, health administrators, economists, sociologists and anthropologists. The PSPU will keep constant watch on all critical areas of strategic concern through regular action research. The critical areas would include health care financing, decentralization, health management, quality of care, equity, primary health care, public health and health promotion.

5.3 Organizational Changes

The organizational review (referred to in Para 5.2.2 above) has brought out a number of factors affecting performance within the Health and Family Welfare Department. Changes in the systems, styles and internal structure are called for, to remove those constraining factors and improve the health care management functions. Since the successful implementation of the strategies depends on the appropriateness and strength of the organization, an all out effort will be made to improve the capacity, culture, structure, systems and processes within the organization through a set of carefully chosen strategies.

5.4 Health Management and Administration

A core group of young and middle level health professionals of different categories will be trained in health management and administration. This will help increase professionalism in management of public health, hospitals and health centres. Induction and in-service training will be conducted through the State Institute of Health and Family Welfare (SIHFW), with the involvement of outside experts and local faculty. Service and job protocols and responsibilities will be reviewed, updated, disseminated and discussed with staff.

The Health Management Information System will be suitably strengthened for timely decision-making in personnel management. Vacancy positions will be filled in a transparent manner without delays with trained personnel. Mismatch of specialists and staff will be minimized. Monthly staff position status will be provided to the leadership. Performance appraisals at institutional, district and state level will be streamlined.

Systems for engineering, construction and maintenance of infrastructure; procurement, maintenance and condemnation of equipment and transport; drug procurement and distribution will be strengthened based on the experience gained in the past few years. Contracting out of non-core activities such as the cleaning, laundry, security, dietary and gardening sections will be reviewed, and the most suitable outsourcing framework and mechanisms will be evolved after due consultations. Conditions for adequate wages and social security of contract staff will be ensured as contractual obligations in the memorandum of understanding (MoUs).

5.5 Role of *Panchayati Raj* Institutions (PRI)

In keeping with the 73rd and 74th Constitutional Amendments and the National Health Policy 2002, the role of PRIs (rural and urban) in governance and implementation of the public health programmes will be appropriately laid down in consultation with PRIs, followed by adequate financial devolution by 2005. The Health and Family Welfare Department will take responsibility for capacity building of *Gram Panchayat* and ward members to discharge the above functions,

in collaboration with Departments for Panchayati Raj and Rural and Urban Development, and with the involvement of NGOs. Experiences from States of West Bengal, Kerala, Karnataka and MP will be studied.

5.6 Inter-sectoral Coordination

Though recognized as an important component of primary health care since the Alma Ata Declaration of 1978, inter-sectoral coordination has received inadequate attention. Working linkages and joint programmes will be initiated with the Departments of Women and Child Development and Social Welfare, Education, Panchayati Raj Institutions, Rural Developments, Urban Development, Environment, Mines, Water Supply and Sewerage Boards, and Pollution Control Boards. Mechanisms of collaboration at village, block, sub-division, district and state levels will be established in partnerships with other departments.

5.7 Partnerships

In the past the government, voluntary and private sectors grew and functioned in relative isolation. Through the present policy the health sector will be seen in totality, including the Indian Systems of Medicine and Homeopathy, and the informal health sector comprising of RMPs (Registered Medical Practitioners), traditional healers and local health traditions. The state will play a facilitating role building partnerships between groups, and a regulatory role to maintain standards regarding quality of care in the public interest. There will be sufficient flexibility to allow creativity of each sector to grow. Coordination will be initiated and supported particularly in the areas of disease surveillance, notification, training, and health promotion and for national health programmes will be initiated and supported. Considering the acute shortage of medical manpower in the State, the Government will encourage establishment of medical colleges in the private sector to fill the supply-demand gap.

5.8 Education for Health Personnel

The State Policy recognizes that the basic education, training, continuing education and accreditation of the entire range of health professionals, allied professionals and health workers is vitally important for access to good quality health care. Standards of education have been deteriorating with negative effects on health care. The Government, along with Universities, professional councils and associations will undertake measures to ensure high standards in teaching and examinations, with revisions of curricula to be updated and made socially relevant. Learner centered, problem solving and experiential educational methods will be encouraged. Educational units in the different colleges will be set up, for training teachers and postgraduates in pedagogy. The infrastructure, equipment and teaching aids of colleges, training institutions, associated hospitals and health centres will be improved in accordance with norms laid down by national

councils. Staffing with required number of qualified teaching personnel, selected on merit will be ensured.

The annual and five-year financial and other resource requirements will be worked out for and by each institution, within a stipulated time. Plans will be made to assure resources from different sources. Fund raising bodies will be established for each major institution, involving well-known personalities from the public and private sector.

Research will be encouraged to provide good academic ethos and to address important, locally relevant medical and health problems. Library and Information technology facilities will be upgraded. Teaching and training institutions will adopt primary health centres (and associated sub-centres); community health centres and district hospitals so that students learn in varied health care settings, with teachers also working in these institutions.

The State Institute of Health and Family Welfare will be developed into a high quality centre for induction and in-service training, and integrated continuing education for various grades of health personnel. It will be organizationally linked to the district training centres and other health worker training institutions. The necessary infrastructure and staffing will be made available. Faculty development will be encouraged through attending conferences, seminars, and short courses and through writing professional papers. Good performance will be mandatory with annual reviews.

Each teaching institution will bring out annual reports highlighting their academic, training, service and research activities, as well as the financial and administrative aspects.

5.9 Rational Drug Policy

There are over 60,000 formulations of medicinal drugs in the open market. The essential drug list (EDL) of the World Health Organization lists about 300 drugs necessary for secondary care and 50 – 60 drugs for primary health care. There is an abundant over production of vitamins, tonics, health drinks, cough and cold preparations, over the counter preparations, tranquilizers, antacids and a range of other formulations. The production, sale and prescription of irrational and hazardous drugs constitute a major area of concern.

The State has already introduced an essential drug list, and measures regarding pooled drug procurement, quality assurance and distribution for its own health institutions. These will be sustained and further developed. It will regularly review and update the essential drug list, drug policy and therapeutic guidelines, rate contract lists, registration and re-registration, drug selection, pooled procurement, quality assurance systems, and drug management systems, all with transparent procedures through established bodies and with the participation of

professionals, consumer groups and the public. Use of generic prescribing will be promoted. Drug donation guidelines will be developed and implemented.

The State will continue its responsibility to ensure that all people can obtain drugs (including vaccines immunologicals and blood products) that they need, at affordable prices assuring safety, efficacy and quality. Hazardous drugs will be withdrawn from the market. List of banned drugs and their formulations, with trade names will be widely publicized in the consumer interest.

Education of medical professionals and pharmacists with periodic information dissemination regarding rational therapeutics will be encouraged and supported. The right to information will be respected and protected. Information about harmful, hazardous and irrational drugs will be made public. Adverse drug reaction monitoring will be piloted and developed through medical and pharmacy colleges and councils. Drug package labeling and inserts will carry unbiased drug information, with necessary warnings in Oriya and English in print large enough to read.

The Drug Control system will be strengthened with necessary qualified staff and support laboratories. Quality tests and inspection for good manufacturing practices (GMP) will be regularly done. The rational drug use unit will hold workshops and training programs, publish newsletters and updates, conduct prescription audits and studies and other activities for the wider promotion and practice of rational therapeutics. Drug pricing of new drugs following the new patent laws will be studied in the context of access to antiretroviral drugs for HIV/AIDS, psychiatric drugs, newer antibiotics etc. Linkages will be made with national and other bodies in this regard to explore compulsory licensing and methods to procure drugs at low cost to meet public health needs.

Rational drug policies for the Indian Systems of Medicine and Homeopathy will be introduced, following discussions with their councils and experts.

Functioning of blood banks will follow national guidelines, ensuring availability and distribution in rural areas. Rationalization of blood use, and preparation and utilization of blood components will be promoted.

6. Public Health and Medical Care

6.1 Nutrition, Water Supply and Sanitation

Analysis of recent data on nutritional status and data from the multi-disease surveillance system indicates high levels of under-nutrition and anemia especially among women and children and a large burden of diseases due to water and sanitation related causes. It is evident that unless people have access to basic determinants of health such as adequate food and nutrition, potable

water supply and sanitation facilities, the health status of the community will not improve.

While action is called for through different departments, the specific role of the Health and Family Welfare Department is important. The following steps will be promoted towards better nutrition: nutrition education of mothers and families through health workers in collaboration with ICDS functionaries; improvement in nutritional content of supplementary feeding using low cost locally available food through self help groups; improved training of health professionals regarding nutrition; nutrition and growth monitoring with trend analysis; vitamin A, iron and folic acid supplements for women and children, under supervision; early detection and treatment of childhood illnesses to prevent deterioration of nutritional status; and de-worming. These are indicative, and the department will support any action by local communities towards promotion of nutritional status.

Regarding water supply and sanitation, the specific role of the department will be limited, such as testing of water quality through its laboratories, health promotion regarding water and sanitation related problems and how they can be prevented, outbreak investigation, regular chlorination and water purification. However, efforts will be made at better inter-sectoral linkages to achieve synergy in action and outputs towards this goal.

6.2 Environmental and Occupational Health

The workplace and environment have important effects on health. Of particular concern are exposures of people in mining areas, impact of pesticide use; and water pollution. There is increasing pollution of air, water and soil due to rapid, often unplanned industrialization; inadequate compliance with pollution control regulations and poor monitoring. Increased chemical pesticide use, including of banned products, has affected the food chain. Research undertaken by universities, research groups and NGOs will be studied carefully and necessary action initiated. Health and environment impact assessment of developmental projects, industrial and power plants, dams and mines etc. will be undertaken. Government will ensure that adequate measures are taken by public and private owners regarding occupational health and safety.

The health sector will work in collaboration with the concerned agencies to improve drainage and sullage systems, and solid waste management in keeping with Supreme Court guidelines. The Government will also give priority to proper hospital and health care waste management in the public and private sector.

6.3 Population Stabilization

The National Population Policy 2002 forms the context for efforts by the State towards population stabilization. Data suggest that the small family norm has

been largely accepted. The Total Fertility Rate (TFR) in Orissa was estimated by NFHS2 at 2.5. The state is expected to reach the replacement level of TFR of 2.1 during 2011 – 2016. The decadal growth rate is declining and was 15.9 percent in 1991 – 2001, significantly lower than the national growth rate. The age of marriage at 19.8 is higher than the national average. However the momentum of population growth will continue due to the young age distribution of the population. Thus the focus of the policy will be on providing good quality contraceptive care and increased access to spacing methods. This will be achieved through integration with the general health services. The vertical programme approach will be broadened. Reduced maternal and infant mortality, improved reproductive health care for women and men, and life-skills education will receive support (refer Para 6.8). Public campaigns and professional education against son preference and sex selection will be undertaken. Gender equity with reproductive rights will be one of the core thrust areas of the Policy. Appropriate steps such as training, application of community needs assessment, treatment of RTIs and STDs, women's health empowerment training, male involvement, and attention to the population growth of primitive tribes, will be taken.

6.4 Communicable Diseases / Infectious Diseases

These are still a major cause of morbidity and mortality in Orissa. Communicable disease control will therefore be given high priority, particularly malaria, diarrhea, acute respiratory infections, tuberculosis, leprosy, filaria, HIV/AIDS, STD/RTIs, and measles.

Capacity will be built for early detection and complete treatment at primary health centres, the health institutions closest to homes of people. Efforts will be made to reduce transmission through provision of safe water and sanitation facilities; integrated vector control including use of bioenvironmental methods; immunization and health promotion. The multi-disease surveillance system (MDSS) will be further consolidated, covering all government facilities, private and voluntary facilities and ISM& H dispensaries. It will be expanded into a public health surveillance system in a phased manner. The laboratory services will be strengthened at PHC, block, district and state level. Uninterrupted drug supplies will be ensured. Recording and reporting systems will be improved. The information technology base and network will be expanded. An understanding of these disease, their spread and methods of control will be given priority in professional education and community health education. In order to make time bound gains in communicable disease control, besides technical and financial support, attention will be paid to leadership, governance, management and administration of these programmes, with community involvement. The respective national health programmes will function as an integrated part of primary health care. Close supervision will be provided in the field by district and state programme officers. Performance reviews will be conducted at a higher level, learning from the field realities to fine-tune the operational strategies. A geographic and time trend analysis, through epidemiological units, will support

control interventions. The MDSS will feed into the National Disease Surveillance Network.

6.5 Mental Health

The burden of suffering from mental illness is large enough to make it an issue of public health importance. Two percent of the population suffers from severe mental morbidity at any point of time and ten percent from neurosis, alcohol and drug addictions and personality problems. About 20 – 25% of outpatients at primary care centres come with psychosomatic symptoms. Currently more effective treatment, counseling and management methods for persons with mental illnesses are available. In keeping with the Mental Health Act of 1986 the state will develop its mental health services by sending young staff members for training in psychiatry, clinical psychology, psychiatric nursing, counseling, psychiatric social work etc. Non-institutional, community based, innovative methods of mental health care will be encouraged. The mental health component in the training of all health professionals will be strengthened. The medical colleges will be supported to develop their departments of psychiatry. Provisions in the national mental health programmes will be utilized to initiate district mental health programmes. Adequate supply of drugs for psychiatry and epilepsy will be made available at district and peripheral health institutions.

6.6 Non-Communicable Diseases (NCD)

Orissa, as in India, carries the double burden of pre and post-epidemiological transition disease patterns. Non-communicable diseases such as cardiovascular diseases, cancer, diabetes, accidents and injuries, blood disorders and newer environment-related disorders are on the increase. They will increase with rising life expectancy. The state will adopt a two-pronged approach to address NCDs:

a) Public health strategies to reduce risk factors and health education:

It will initiate policies to reduce use of tobacco as is being done by several countries and states in India, following WHO guidelines. These include bans on sponsorship of sports and entertainment; bans on direct and indirect advertising; higher taxation; barring sales within certain distances of educational institutions; public education regarding health effects of smoked and chewed tobacco especially for children and youth; banning smoking in public places; and education of health personnel. Steps to reduce alcohol abuse will also be initiated, some of which will be similar as for tobacco.

b) Facilities for diagnosis and treatment for non-communicable diseases will be improved at district and CHC level. Training updates for PHC doctors will be done as part of the integrated in-service continuing education. Over time the recording and reporting of NCDs as per the International Classification of Diseases will be introduced into the disease surveillance system, after necessary training, preparation and pilot testing.

6.7 Health Promotion

Information, Education and Communication (IEC) activities are fragmented, being linked to different programmes. Health promotion will be developed in an integrated and more professional way with feedback loops from the community and youth. It will shift focus from merely communicating information towards participatory change and empowerment. It will enable people to increase control over and participate actively in improving their own health. Different groups such as school children, youth, women, workers and farmers will be addressed appropriately, and the use of local folk media will be encouraged. The State Institute of Health & Family Welfare will lead this function. Pooling of resources from different programmes and from the community will be done. School health programmes will be implemented.

6.8 Health of Women

This is a high priority in the State (refer Para 4.1.3 and 6.3). The policy components for women's health will be in synergy with the Women's Policy, which is being formulated. The entire range of women's health problems for all age groups will be addressed, in the overall context of improving their social status under a gender perspective. There will be enough focus on nutrition, maternal and reproductive health care, mental health, self-esteem, and access to general health care preferably with women health professionals wherever possible. Many health problems of women have social roots, and therefore, interventions will have psychosocial, community health and medical components. Sensitization of health providers to these components will be part of their integrated training and continuing education.

6.9 Health of Children

Investing in the health and wellbeing of children is investing in the future. The state already has several health interventions for children through the RCH programme, the IMR reduction strategy, and the ICDS. The state is distressed about the high Infant Mortality Rate, widespread under-nutrition and anaemia in children, leading to stunted growth and development, and other health problems.

The State will ensure better functioning of all programmes directed at improving health of the children. The coverage and quality of the Integrated Child Development Services (ICDS) with regard to nutrition and health care will be expanded and improved, in collaboration with other departments. School Health programmes will be supported and developed further in partnership with the community, NGOs and the private sector. School age children comprise about 25% of the population and are at a very receptive and vulnerable stage in life. Innovative efforts to reach out of school children, working children and street children will be made through Self help groups, NGOs, women's groups and children's groups. Health care and education of adolescent girls and boys will be supported.

6.10 Disability Reduction and Management

Persons with disability constitute 3 – 4% of the population of India. The 2001 census will provide state-specific information for Orissa. The health services will help minimize preventable disability through immunizations, genetic counseling and reduction of injuries. Medical rehabilitation services at district level will be established using national programme and external resources. The range of services will be expanded. Community based rehabilitation services will be encouraged through community health programmes. The provisions of the "Persons with Disabilities Act, 1995" will be implemented.

6.11 Oral Health (including Dental Health)

Though oral and dental health has an impact on general health, this has been a neglected area in policy and service provision. Preventive oral health will be encouraged through school health and health promotional programmes. Services at district and sub-divisional hospitals and gradually in CHCs will be improved, through provision of equipment and staff. Services of paramedical personnel as dental hygienists will be used. All dentists' posts will be filled and the number of positions gradually expanded.

6.12 Indian Systems of Medicine and Homeopathy (ISM&H)

Services of these systems though popular among people function in relative isolation and receive inadequate financial support and little policy attention. Shifts will be made with greater resource allocation, and involvement in decision making, health planning and service provision. This will increase the choices for the community. Establishment of ISM&H units in the same premises of the district hospitals will be attempted to enable sharing of infrastructure, diagnostics and nursing care, and better access by public. ISM&H medical colleges will be strengthened and continuing education promoted for public and private practitioners.

6.13 Medical Industry and Technology

Technological up-gradation will be undertaken in pathology, microbiology, virology and clinical biochemistry departments in secondary and tertiary hospitals, including medical colleges. Specialized departments of plastic surgery, burns, trauma care, oncology, cardiology, cardio-thoracic surgery, neurology, neuro-surgery, immunology, genetic studies and others will also be developed. The procurement, maintenance and insurance of costly medical equipment and health accessories will be regulated through a specialized body, which will be established with government, private and voluntary sector professionals, and NGO and consumer representatives. Criteria will include need, quality, cost-effectiveness, safety, and patient and consumer interests.

6.14 Disaster Preparedness

Following a series of major disasters, the Government established the Orissa State Disaster Mitigation Authority (OSDMA). The department will continue to work on comprehensive health system preparedness and planning for disaster response at state and district levels.

Institutional capacity building for the health sector will be facilitated. Emergency response and comprehensive follow-up services that include medical, public health, psychosocial and rehabilitative components will be strengthened. Coordination, networking, communication and building community preparedness for rapid response during disasters will be undertaken systematically.

7. Conclusion

The Policy document is a guiding document providing a framework for the integral development of the health sector in Orissa to meet its stated social goals and objectives. The Policy is a working document, which will evolve and change over time in response to emerging needs and challenges. The strategic planning mechanism built into the Policy will take care of that function. Through this Policy statement, the Health and Family Welfare Department, Government of Orissa, hopes to make a positive change in health and health care within a definite timeframe. Medium term strategies and action points have been developed using a participatory approach. The Strategy sections may be referred to, for a detailed understanding of how the issues contained in this Policy paper are addressed. Annual plans of action will be developed at the appropriate time identifying details of how, by whom and when, interim goals and objectives will be met. Reviews will be inbuilt with the strategic planning process. In conclusion, the Health and Family Welfare Department reiterates its commitment to improve the health of the people of Orissa and to work in partnership with all who share similar goals.

8. Goals to be Achieved

Sl. No.	Issue	Time Frame
1.	Eradicate polio and yaws	2005
2.	Eliminate leprosy	2005
3.	Eliminate lymphatic filariasis	2015
4.	Achieve zero level growth of HIV/AIDS	2007
5.	Reduce mortality by 50% of on account of TB, malaria, other vector and water borne diseases	2010
6.	Reduce prevalence of blindness to 0.5%	2010
7.	Reduce IMR to 45/1000 and MMR to 100 / 100,000	2010
8.	Increase utilization of public health facilities from current level of <20% to > 75%	2010
9.	Establish an integrated system of disease surveillance, national health accounts and health statistics	2005
10.	Increase share of central grants to constitute at least 25% of total health spending	2010

11.	Increase state sector health spending from 3% to 5% of budget	2005
12.	Further increase this to 6%	2010
13.	Increase extra-budgetary health allocation and spending from alternative sources.	2005
14.	Establish networks between public, voluntary and private sectors at state, district and local levels.	2005
15.	Introduce mechanisms for community feedback and participation.	2005
16.	Incremental measurable achievement of equity goals	2005
17.	Establish training and mechanisms for involvement of Panchayati Raj Institutions at district and gram/ward panchayati levels	2005
18.	Create adequate infrastructure for the public health system with maintenance and management systems	2010

8.1 Priority Outcomes

While the State will pursue all the above mentioned goals, it will take up the following 7 items on priority basis :

1. Eradicate polio and yaws
2. Eliminate leprosy
3. Reduce mortality due to malaria by 50%
4. Reduce IMR and MMR
5. Increase utilisation of public health facilities from current level of <20% to >75%
6. Establish networks between public, voluntary and private sectors at state, district and local levels
7. Create adequate infrastructure for the public health system with maintenance and management systems.

(Chapters 5 – 8)

HEALTH STRATEGIES AND ACTION POINTS

(Chapter 2 - 8)

CHAPTER FIVE (COMPONENT – I)

PUBLIC HEALTH AND PRIMARY HEALTH CARE

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CHAPTER 5.1

EQUITY AND ACCESS

A. Introduction

The overall goals of the health systems are to reduce mortality and morbidity, ensure equity in health status, protect the poor and disadvantaged from financial costs of illness and increase public satisfaction.

Inequality occurs due to income differentials as well as societal prejudices and structures. The health status of scheduled tribe and scheduled caste (SC/ST) populations facing the double burden of social exclusion and poverty, can serve as a sensitive indicator for inequities. Other socially and economically marginalized sections of the population include the aged, mentally retarded, disabled and physically handicapped persons. These groups, especially in the below the poverty line families from the poorest 20% income quintile have a low social value, and are usually neglected by health care services.

Overcoming inequity in health is therefore a major challenge for the Orissa State Health Sector Strategy. It requires the elimination of unjust differences in the opportunity to enjoy health, and creation of equal access to health services when ill or incapacitated.

B. Situation Analysis

In Orissa, marginalized groups comprise around 36% of the population. Women from these groups face multiple disadvantages of income, caste and gender discrimination. Women in general have a lower social status and this exposes them to more health risk factors. They also have lower utilization of health care services.

Almost 81% of ST / SC groups are landless labourers with practically no assets (Census 1991). They have consistently worse health outcomes and low access to health care facilities. Disadvantaged groups carry a larger burden of disease. It is observed that State health systems that direct resources and energies to address their health needs achieve better over all health status for the entire state. The wider the differentials for ante-natal care and full immunization coverage between ST/SC and other groups, the worse is the health outcome in the State, in terms of higher Total Fertility Rate, under five Child Mortality Rate, and under three malnutrition rates (RCH survey, IIPS 1998-99). A 1% increase in each of literacy rate, full

immunization coverage and ORT use decreased under five Child Mortality Rate (CMR) by 0.64%, 0.44% and 0.76% respectively (Satyasekhar, MHFW 2001).

A prerequisite to good health outcomes is physical access to health care facilities. National Sample Survey data shows that the percentage of disadvantaged groups not accessing health care for locational reasons is higher in poor performing states. Likewise, the better performing states have relatively higher public bed strength. An infrastructure resource mapping or Geographic Information System (GIS) is required in Orissa to identify and improve locational and infrastructural inequities that drive up health costs for disadvantaged groups. This could be done by disaggregated spatial data at district, sub district and block levels. Existing data reveal that there is no shortage of primary health care outlets such as PHCs, if the population norm is applied to the State's population as a whole. However, when assessed Block-wise, there is a shortage of PHCs, particularly in tribal areas. There are 1166 single doctor primary health centres (SD PHC) or PHC (N) in the state. Taking into account the norms for establishing PHCs at the rate of one per 30000 populations in general and one for 20000 in tribal areas, there is need for an additional 39 SD PHCs in tribal areas alone. However, the benefits of establishing single doctor PHCs is somewhat doubtful. Doctors are reluctant to stay in these institutions and the services offered are consequently uncertain. It is therefore a better strategy to strengthen block level and community health centres. There are 156 block PHCs which remain to be converted into community health centres. Forty-three out of them will soon acquire that status with inputs from the Orissa Health Systems Development Project. The ultimate aim is to establish 30 bedded first-referral facility in all 314 block level institutions in the state.

The cost of health care has grown enormously with adverse effect on the health and economic status of disadvantaged groups. On an average they spend 12% of their annual income on health care opposed to only 2% spent by the rich. However the richest 20% enjoy three times the share of public subsidy for health compared to the poorest quintile (NCAER 2000). Hospitalized ST/SC people spend more than half their total annual expenditure to buy health care, while 45% borrow money / sell assets to cover expenses and 35% fall below the poverty line (India -Raising the Sights - WB 2001). Out of pocket medical costs alone may push 2.2% of the population below the poverty line in one year. The number of disadvantaged poor, who did not seek treatment because of financial reasons increased from 15% to 24% in rural areas and doubled from 10% to 21% in urban slums in the decade 1986-96.

Apart from geographic, social and economic adversity, low awareness of ill health affecting health seeking behaviour of ST/SC and other disadvantaged groups remain an important barrier to better health outcomes in the state as a whole. A majority of their ailments are preventable and easily curable with timely medical attention and a little money, yet unsatisfactory public health programmes and public facilities, force them to spend their meager earnings on private health care.

In view of easy accessibility; flexible payment terms; willingness to treat on credit; drug delivery at door steps, and transporting patients when required to medical institutions, Registered Medical Practitioners (RMPs) though debarred from practice, are approached by people more often than trained medical officers in rural areas. Their quality of care may be questionable. However innovative ways of training, regulation, supervision and networking RMPs could be of benefit to the community.

Poor care in public facilities due to absenteeism of doctors / staff, rude behaviour, corrupt practices, long waiting time, un-suitable timing, unclean surrounding and lack of privacy, force the disadvantaged poor to choose private practitioners, resort to self-medication or deny themselves treatment. The market share (i.e., utilization of services by the community) of PHCs is less than 8%, down from 29% in 1986 (NSSO – 52 round).

Thus, while the political agenda of the country since Independence is vigorously pro-poor in approach, health policy has not been so in programme design or in allocation of budget and other resources. Absence of disaggregated health status data of disadvantaged and below poverty line groups reduce the evidence base for change. The consequence has been low priority to pro-poor interventions. In the absence of proper focus and of social justice, the rich receive a disproportionately higher subsidy.

The process of globalization is a destabilizing factor. Evidence is growing from India and elsewhere of increasing inequity in health and health care caused directly and indirectly by this process. Expected increases in prices of drugs, advanced medical technology and medical services after 2004, under TRIPS (Trade Related Intellectual Property Rights) and GATS (General Agreement on Trade in Services), will widen health care disparities between the rich and poor.

All these points reveal the nexus between ill health and deprivation – the disadvantaged poor become ill and illness makes them poorer. This calls for a proactive pro-poor public policy to ensure access to health services as an integral component of health strategies. Interventions focusing on the marginalized will be a part of the overall health services and not a separate programme. This is the greatest challenge that the Orissa state health system faces. The equity imperative is crucial to betterment of health.

C. Objectives

The overall objectives of the public health policy and strategy for equity and access in health care are:

- 1) To further develop health care services with improved access and quality to respond to the needs of disadvantaged groups.
- 2) To ensure that no one is denied services due to inability to pay.
- 3) To ensure better and equitable utilization of services.

All these require positive provider attitudes based on values of respect for human dignity.

D. Strategies

A comprehensive, integrated equity oriented approach will crosscut all health system strategies.

1. Increased health spending

- i) The State will be committed to increase health spending to address health needs of disadvantaged groups, in accordance with the National Health Policy 2002. Support of central government will be sought. Higher priority will be given to support primary and secondary health care systems.
- ii) Additional financial resources from within Orissa and outside will be mobilized to augment public health programmes and services. This will include private sources, societies, trusts, companies, individuals, non-resident Indians etc. Health Centres may be adopted or twinned by other groups.

2. Promotion of the third sector (not-for-profit voluntary sector)

- i) The voluntary, not-for-profit, non-governmental health sector will be supported through tax relief, subsidized inputs such as land, power, water and concessional credit particularly in under-served backward areas. There will be active partnership with them in planning, programme implementation and reviews.
- ii) The community itself will be seen as a most important resource. Their healing traditions and knowledge, and contributions of time and service will be valued. Mechanisms for community involvement at sub-centre and PHC level will be developed in pilot sites and expanded.

3. Restructuring the public health systems to increase accountability

- i) Available resources will be preferentially allocated to backward areas, regions and to disadvantaged populations within them. Allocations and expenditures will be made public through annual reports, websites and other locally accessible means.
- ii) State level policy attention will be given to strengthening capacity and processes for devolution of authority to district and block functionaries.

- iii) After setting standards for health care provisions, transparent and objective systems will be put in place for graded monitoring, evaluation and improvement of performance. Local controls will be facilitated.

4. Promoting Social Health Insurance

- i) Sickness funds will be available in vulnerable tehsils / districts with panchayati raj institutions (PRI) and health institutions to provide financial risk protection to the poor and disadvantaged against specific illness and hospitalization costs.
- ii) Adequate safeguards and incentives will be ensured in insurance schemes. Low cost community insurance programmes run on the principle of risk pooling by local bodies, NGOs, self help groups or autonomous government / private hospitals will be developed. Pilot social insurance schemes will be tried at tehsil / district level.

5. Improving public sector efficiency and utilization through a mix of inputs

- i) Upgradation of health facilities will be linked with reform in hospital management, financing and accountability systems. This is covered in greater detail in other sections.

6. Management Information System for data on health indicators for the poor and disadvantaged

- i) Systems for collection, compilation, analysis and feedback of relevant data will be developed for evidence based policy formulation and programmatic interventions with disaggregated data, focussing on the disadvantaged. Economic, gender, social and geographical factors will be used in the disaggregation.

7. Differential Planning and Budgeting

- i) Need based planning and budget allocations will be made in accordance with the extent of disease burden, economic backwardness and poverty levels of regions, districts and blocks.
- ii) In order to address the situational disparities, local planning will be encouraged, based on MIS data on the disparities existing among communities.

- iii) Ten districts referred to as the KBK plus districts will receive preference in budget, infrastructure and staff allocations because of larger marginalized populations, difficult terrain, lower population density and lower health indications.

8. Strengthening incentives, regulation and redress mechanisms

- i) Where required regulatory mechanisms will be established to ensure optimum utilization of facilities by the poor and disadvantaged. Medical audit and innovative mechanisms to check exploitation and malpractices will be instituted.

9. Outreach services in inaccessible areas

- i) To ensure health care in tribal and remote / hilly areas, mapping of health facilities will be done and deficiencies made good through mobile health units. Local bodies (PRIs) will be encouraged to establish and run mobile health units in tribal areas.
- ii) Appointment of Community Health Workers in tribal areas, selected from the habitation by the community, trained and paid by the state (as done in Andhra Pradesh) will be done with necessary modifications made to gain community support, participation and self-reliance. Involvement of traditional healers and dais will be encouraged, with training and linkages with support systems.

10. Establishing more PHCs in tribal areas and converting all block PHCs into CHCs

- i) The existing shortage of PHCs in tribal areas will be made good by establishing approximately 39 new PHCs. This will however be done on the basis of a detailed facility mapping exercise, and in consideration of other factors influencing access of tribal people to adequate primary health care
- ii) Facilities in all block PHCs will be upgraded in a phased manner, and in Blocks where no CHCs exist the remaining Block PHCs will be converted into CHCs.

11. Primary health care in urban slums

- i) Cost effective interventions will be made through the infrastructure and manpower available in the established private sector, local bodies and NGO establishments (as in West Bengal, Karnataka and Andhra Pradesh on public /

private partnership basis to address health needs of the urban poor. Services of doctors and allied health professionals for basic and specialist care may be contracted from the private sector.

- ii) Donations and sponsorship will be sought from the private sector and philanthropists to support particular interventions e.g., for street children's health care and health promotion in government and municipal schools.

CHAPTER 5.2

PUBLIC HEALTH NUTRITION

A. Introduction

Children whose early years are characterised by disease, hunger, poverty, or whose minds are not stimulated by appropriate interactions with caregivers and their environment, pay for these early deficits through out their lives. They are more likely to do poorly in school, to drop out early and to be marginally employable. Nutritional deprivation robs the children of their ability to fight infections. Superimposed upon a background of deprivations these lead to major setbacks in their growth, development and even death. Evidence suggests that malnutrition, even in its milder forms, can increase the likelihood of death from a number of diseases and may be associated with over half of all childhood mortality. To have a sustained impact on childhood morbidity and mortality, health programmes, therefore, must include interventions to reduce malnutrition.

B. Situational Analysis

Despite investments made in nutrition, health, food security and education, malnutrition rates remain high in the State. As per the second round of National Family Health Survey (NFHS - II, 1998-99), 54% of children below three years are undernourished, with 21% suffering from severe under-nutrition (weight-for-age $<-3SD$). Moreover between NFHS I (1992-93) and NFHS II (1998-1999), the proportion of children who are underweight more or less remained the same. However, the percentage of children who are severely underweight registered a marginal decrease of two points between NFHS I and II.

Orissa is one of the ten States in the country covered under the National Nutrition Monitoring Bureau (NNMB). According to the latest NNMB data (2000-2001), nearly two-thirds (65.9%) children below five years are underweight (weight-for-age $<-2SD$), of which 25% are severely undernourished (weight-for-age $<-3SD$). Between 1990-91 and 2000-2001 the prevalence of severe undernutrition in Orissa declined from 35.7 % to 25.2 %, while the corresponding decline for all the nine states combined is 9%. On the other hand, during the above-mentioned decade, moderate malnutrition in Orissa registered an increase of 7.6%, whereas overall in the nine states, level of moderate malnutrition registered a decline of 7.2%. * Among the nine states covered in 2000-2001, Orissa continues to have the second highest level of undernutrition. When compared with the aggregate figures for chronic energy deficiency ($BMI < 18.5$) in adult men and women in nine states, the level in Orissa is higher. The chronic energy deficiency (CED) in adult men in the state is 38.6% as compared to aggregate of 37.4%, whereas corresponding figures for CED in adult women are 46 and 39.3% for Orissa and combined data for all the nine states respectively *.

*National Institute of Nutrition, ICMR, 2002: National Nutrition Monitoring Bureau – Diet and Nutritional Status of Rural Population.

The immediate determinants of child growth and development are adequate food intake, opportunities for playing & communicating and freedom from disease. These three are determined by three underlying conditions: household food security, access to health services and a healthy environment & adequate caring practices. Availability of food, health and care in turn are affected by the basic determinants of political, historical and economic structures. Food, health and care are all necessary, but none alone is sufficient for child survival, growth and development.

C. Objectives

Public health nutrition interventions in the state aim to improve the nutritional well-being and health of people through the Department of Health and through inter-sectoral collaboration. In line with the National Nutrition Policy, the objectives are:

1. To achieve a 30% reduction in moderate and severe malnutrition by 2010, as compared to baseline of 2000,
2. To eliminate vitamin A deficiency by 2005.
3. To encourage and ensure that 90% households use iodised salt.
4. To promote appropriate diets and healthy lifestyles through nutrition and health education to improve work capacity and reduce the risk of degenerative diseases.
5. To improve household food security through poverty alleviation programmes.

D. Strategies

A preventive and promotive approach is being adopted, with strategic focus on certain areas. Guidelines from the existing policy framework will be used, namely the National Plan of Action for Nutrition; National Nutritional Anaemia Control Programme; National Prophylaxis Programme Against Blindness due to Vitamin A; National Iodine Deficiency Disorders Control Programme; Infant & Young Child Feeding Guidelines; and the Women's Policy.

1. Improved co-ordination with other departments

Better coordination between Departments of Health, Women and Child Development through the Integrated Child Development Services Scheme (ICDS), Rural Development & Panchayat Raj. This will improve access to a good quality integrated package of health and nutrition care services by pregnant and lactating women, children below two years and those segments of population who presently, by and large, are out of reach of the routine service delivery system.

- i) A framework for organizational responsibility at state and district level will be established early, with identification of nodal officers and reporting

National Nutrition Monitoring Bureau -
District and Sub-District Level of Rural Population.

Systems, building on existing mechanisms. Competency will be enhanced regarding technical & managerial components of nutrition programmes, including project formulation, management and monitoring.

- ii) Incremental increase in coverage of children by supplementary feeding and other nutrition services will be ensured.
- iii) Special focus will be given according to evidence-based need e.g. KBK Plus districts, specific taluks or vulnerable groups e.g. street children.
- iv) Nutrition competence and skills of ANMs, anganwadi workers and supervisory staff will be increased, through integrated training and continuing education
- v) Vacancies of these staff will be minimized.
- vi) Collaboration with people's organizations, NGOs and the private sector will be increased.

2. An effective integrated communication strategy

will be developed to empower mothers' groups and families to ensure household level care of pregnant and lactating women, children below two years, care of women & girl children and care of children during illness.

- i) A professional group for nutrition education and communication will be established to advise and support the intervention.
- ii) Resources will be collected and developed using creative communication methods including folk media. Low-cost local foods and recipes that are nutritionally good will be encouraged.
- iii) Workshops will be held at regional levels to identify relevant contents of nutrition education, and develop communication strategies.
- iv) Dietary concepts from the Indian Systems of Medicine will be incorporated.
- v) The network of women's samitees, self-help groups, gram and ward panchayats will be involved.
- vi) A variety of methods will be used including print and electronic media, group education, and person-to-person methods. The thrust of group and interpersonal communication will be on feeding demonstrations, negotiations with families for improved care practices etc.

3. Interventions for adolescent girls

will be introduced statewide, so that they are better prepared for their future role not only as mothers, but also as informed individual having a say in issues concerning them directly or indirectly.

- i) Iron supplementation and de-worming to reduce iron deficiency anaemia,
- ii) Educational interventions for better nutrition leading to gain in weight and height.
- iii) Forging effective partnership with schools, to promote health of school children, and to address issues of adequate hygiene practices, food safety, micronutrient malnutrition and adequate dietary practices to promote healthy lifestyle.

4. Effective data management

will be introduced at state, district, block and community level with emphasis on assessment, analysis and action.

- i) Some of the key indicators to be used are
 - % Under three years children with underweight, wasting and stunting;
 - % women with adequate antenatal care;
 - % immunization coverage;
 - % children born with low birth weight;
 - % households with correct management of childhood illnesses;
 - % prevalence of micronutrients deficiency;
 - % families below the poverty line; and
 - % vulnerable population outside the reach of social security net.
- ii) Growth monitoring for children below two years will be done once a month, whereas children in the age range two to five years will be weighed once in three months. This will be discussed with WCD prior to implementation. Growth monitoring information will be used for health promotion with mothers and families.
- iii) A nutritional surveillance system will be put in place to complement the existing ICDS MIS. Existing institutions like medical colleges, nursing schools, home science colleges and organizations such as UNICEF and the National Institute of Nutrition would be involved.
- iv) Special studies may be undertaken on selected samples e.g. anthropometric surveys; surveys of iron deficiency anaemia, xerophthalmia for vitamin A deficiency, and of iodine deficiency disorders. Nutrition mapping of the districts, operational studies and studies of knowledge, attitude and practice and diet will provide useful data for fine-tuning the programme.
- v) Quality of routine monitoring and analysis will be ensured.
- vi) State and District specific database on nutrition would be created using the existing data – NFHS (I & II), RCH, NNMB and Multiple Indicator Cluster Survey (UNICEF).
- vii) Periodic reviews will be undertaken and discussed with concerned people.

5. Augmenting household food security

- i) Improved access of those in need to the Public Distribution system, Antodaya and Annapurana Scheme,
- ii) Emergency feeding for elderly persons and destitute women,
- iii) Community grain banks, mid-day meal and livelihood support through labour intensive work and food for work programmes.

- iv) The policy to ensure universal access to iodised salt in iodine deficient areas will continue to be implemented and monitored for coverage and quality.

Strategies to ensure access to safe water supply and sanitation will be developed later. It is recognised that waterborne and water related diseases constitute a large proportion of the burden of disease in Orissa. Addressing the basic determinants of health such as nutrition, water supply and sanitation is understood as being critical to improving the health status of people in Orissa.

CHAPTER 5.3

CONTROL OF COMMUNICABLE DISEASES

SECTION 1:

CONTROL OF COMMUNICABLE DISEASES IN GENERAL

A. Introduction

Communicable diseases still account for a large proportion of the disease burden in Orissa. Implementation of national health programmes for communicable disease will be optimized, overcoming administrative and technical gaps. Close supervision will be ensured by district and state programme officers to implementers at PHC and taluk level. Value additions will be made to the national health programmes. Locally relevant additional initiatives will be introduced where necessary after adequate discussion and planning.

B. Situation Analysis

Communicable diseases are the major cause of morbidity and mortality in Orissa both among adults and children. Infectious and parasitic diseases accounted for 20% of all deaths and 7% of infant deaths in 1998¹. The magnitude of burden of infectious diseases is illustrated by the health statistics of Orissa for the year 2000-2001 from the public health institutions- (Table 1). Orissa accounts for the largest share of deaths due to malaria in the country; leprosy is far from elimination, yaws is yet to be eradicated, cases of neonatal tetanus and outbreaks of measles are still reported, prevalence of tuberculosis has not reduced significantly, and the prevalence of filariasis and HIV infection are increasing. The central support by the various national disease control programmes for priority diseases is augmented by the state through the free comprehensive treatment cover provided for five diseases of high public health importance under the "*Panchabyadhi Chikitsa*"² scheme. These five major diseases (Malaria, Diarrhoeal illnesses, Acute Respiratory infection, Leprosy and Scabies) are estimated to account for approximately 70% of the morbidity in the state. Morbidity and mortality data of key infectious diseases

(Synonym: *infectious disease*) Illness due to a specific infectious agent or its toxic products that arises through transmission of that agent or its products from an infected person, animal, or reservoir to a susceptible host, either directly or indirectly through an intermediate plant, animal host, vector or inanimate environment. (Last JM, Editor, A Dictionary of Epidemiology, 1997)

² *Panchabyadhi Chikitsa* (5 -Diseases Treatment), Health & Family Welfare Department, Govt. of Orissa.

with improved quality and timeliness is currently available to the health managers for planning and monitoring of infectious disease control programmes through the weekly disease surveillance system comprising of the entire rural public health institutions.

Table 1: Morbidity in Orissa due to Infectious Diseases – 2000 & 2001

Diseases	Cases	Annual Incidence per 100,000 population
Year 2001 – Weekly Disease Surveillance System		
Suspected Malaria	2,985,092	8,132
Simple Diarrhoea	1,712,288	4,665
Bloody Diarrhoea (Bacillary Dysentery)	809,752	2,206
Severe Diarrhoea (Cholera)	147,724	402
Acute Respiratory Infection	2,589,948	7,056
Suspected Meningitis	765	2
Acute Jaundice Syndrome	15,276	42
Measles	7,708	21
Year 2000 – National Programme Statistics¹		
Leprosy (New cases detected)	45,342	124
Tuberculosis (New cases detected)	20,212	55
Filariasis – Clinically confirmed	3,323	9
HIV positives detected	380	1

The performance of the national disease control programmes in the state has been varied. Programmes with high level of technical and financial inputs, and a campaign approach show good results when community mobilization is also high (poliomyelitis, leprosy). They may however adversely affect the functioning of routine programmes and services. Programmes fail when community awareness has been inadequately addressed (lymphatic filariasis). Programmes with high level of inputs but with routine delivery of health technology interventions (vaccines for tetanus, measles etc, anti-tuberculosis drugs) have performed moderately well. Programmes that require interventions that are multi-pronged (malaria) and those that require the coordinated action of many departments including health (water and food borne diseases) have performed poorly. The variability in programme performance is due to problems in implementation, owing to inadequacies in health care infrastructure, staff vacancies, insufficient budgets, low levels of public health knowledge and skills among health managers, rapid changeover of programme managers at district and state levels, poor supervision, corruption and inadequate mechanisms of accountability for poor performance.³

¹ Health Statistics of Orissa 2000-2001: State Bureau of Health Intelligence, Directorate of Health Services, Govt. of Orissa.

C. Objectives

Strategic intervention aims at substantial reduction in morbidity and mortality due to communicable diseases by preventing or decreasing the transmission and providing early diagnosis and treatment. Three major objectives are:

- Improve implementation efficiency of all national programmes for communicable diseases, in a comprehensive, integrated approach, mainly through the primary health care system.
- Bring more communicable diseases under the total risk protection policy (now covering 5 diseases).
- Eradicate selective diseases identified in the Vision for 2010.

D. Strategies

1. Consolidate disease surveillance system for effective management of disease control programmes

The currently operating Multi Disease Surveillance System (MDSS) of the Health and Family Welfare Department, Government of Orissa covers all health facilities administered by the Directorate of Health Services. This system covers 10 communicable diseases / disorders / syndromes. There is flexibility for additions during special circumstances e.g. heat stroke. Some entities covered and not covered by this system are also under surveillance through separate national disease control and other health programmes. Surveillance mechanisms cover only allopathic government health facilities, especially those in the rural areas. Rural homeopathy and Indian system of medicine facilities, and urban (Municipal and ESI) facilities of the state government, the central government health facilities, public and private corporate hospitals, the voluntary sector and the private health sector are currently outside the surveillance network. This situation is not peculiar to Orissa, in fact Orissa is better placed since it is currently the only state with an operational statewide multi disease surveillance system. Consolidating the disease surveillance system is a key strategy to increase impact of the communicable disease control programmes. This involves:

Increased coverage: The number and type of health facilities covered by this system would be increased, including allopathic and Indian system facilities, all rural and urban government facilities and selected private and voluntary facilities. This will also include health facilities of other departments, organizations and local administrative bodies.

Regulatory measures: Apart from government health authorities, private health sector institutions would also be required to implement / fulfil requirements of the Orissa Clinical Establishments Act (OCEA) and the two recent MCI regulations (Jan 2002). It will be made mandatory for any medical practitioner to notify to the district health authority any of the notifiable diseases under CBHI list (17 diseases' data that are sent to CBHI). All

hospitals / nursing homes should maintain records of patients admitted in their wards and should share the relevant information with government authorities if necessary.

Integration and expansion: Data from various special surveillance mechanisms and routine health data reporting system will be integrated into the multi disease surveillance system. The system will later expand to include surveillance of crucial determinants of communicable disease like water quality, food quality, vector bionomics and anti-microbial resistance to make it a comprehensive public health surveillance system. This will start with surveillance of water quality in districts where intensive water and sanitation programmes and/or water resources development / management programmes are being implemented. Progressively the entire state would be covered.

Institutionalizing the system: Disease / public health surveillance will be recognized as a core activity of health services, with annual budget provisions and regular system monitoring.

2. Strengthening five critical aspects of the system at different levels

Information for effective management decisions: Timely and relevant reporting from all institutions to higher levels will be mandatory, not only on disease surveillance, but also on all aspects of programme management. Feedback to lower level institutions will be introduced. Data will be computerized at the district level. Managers at district and block levels will analyse, interpret and act on the basis of timely information. It will also be mandatory to discuss such information at monthly meetings.

Public Health action: In addition to the routine action, this includes epidemic preparedness, outbreak response and care and cure of cases. Activities planned and undertaken in response to the surveillance information should be submitted by all the workers/institutions at the lower rung to the higher rung of the system regularly. State, district, block and sector level task forces for disease control should be activated and the action plans of these task forces should be driven by the surveillance information.

Quality assurance: Action will be directed towards development of guidelines and protocols; monitoring and supervision. Communicable disease control protocols will be developed and distributed to all workers and other health sector actors. Disease surveillance manual will be revised to make it comprehensive and will be linked to the modules used for individual disease control programmes. Uniform guidelines for medical officers and other supervisory staff will be developed for supervision and monitoring of the disease surveillance and control. The Social and Preventive Medicine departments in the three medical colleges will be involved, with responsibility to facilitate quality assurance in 10 districts.

Human resources: This covers areas such as ensuring adequate staff strength; clear role assignment among staff; training for improving knowledge and skills; performance-linked incentives for enhancing motivation; inter-sectoral cooperation and coordination; qualified and committed managers; experts with skills to design, apply and evaluate specific interventions for communicable diseases. The Joint Directors will coordinate all disease control programme. The SIHFW will act as the nodal centre for training needs assessment, development of training strategy, design and execution of various training programmes for different categories of staff, avoidance of duplication in training curriculum, keeping and disseminating proper database of trained persons, identification of expertise for training faculty, identification of other specialized agencies for special training and to collect feedback information on the performance of trained staff and officers. State, district and field level staff will be periodically trained on the basis of need assessment. SPM department of medical colleges will establish facilitating linkages with the SIHFW for such activities. Development of skills in the State to design, apply and evaluate specific interventions for the control of communicable diseases has been identified as one of the priority training areas. Key trainers among the various categories of staff at the sub district level will be identified and trained.

Infrastructure: This would cover vital areas like information and communication technology support, laboratory support, drug supply, mobility support, logistics support and contingency funds.

Laboratory Diagnostics: Laboratory infrastructure at PHC, block, district, regional and state level will be strengthened. Inputs and efforts of all disease control programmes will be integrated to improve capacity and reduce duplication. Additional capacity will be provided after due assessment to all levels of laboratories in a phased manner with pooling of resources from different programmes. Laboratory protocols for communicable diseases will be developed. Laboratory quality control programme will be introduced involving medical colleges, central and other research and reference laboratories to be designed and implemented. Health staff like the male health workers, leprosy workers, pharmacists, health supervisors etc will be equipped with specific laboratory skills to ease the load on laboratory technicians. The laboratory technician at the block PHC could be deputed to the various PHC(N) for a few days a week in rotation to undertake laboratory investigations related to disease control programmes.

Information and Communication Technology (ICT): Appropriate ICT infrastructure including hard ware, software and human resources to be provided, such as phone connection to all medical institutions down to block level CHC /PHCs. All district offices will have fax and email/internet facilities. A computerized network will be established among the DHS, Joint Directors, health Secretariat, critical sections of the health department, CDMO offices, medical colleges and hospitals.

Medicine, and logistics: Drug supply will be streamlined the recent drug policy. The principles of rational drug therapy will underpin all treatment and

control activities and be reflected in protocols that are developed. List of drugs and stocks available for communicable diseases will be displayed in all government health facilities. Mobility support will be provided to disease control task forces, PHC medical officers and other supervisors for regular supervision and monitoring. Adequate logistics support will be provided to institutions at all levels in a planned manner. This would include stationery, forms, registers, health education material, equipment like chloroscopes etc. The state authorities will make special efforts to ensure that externally funded disease control programmes provide all logistics well in advance of the commencement of the programmes. An adequate contingency fund for each level of the health system will be provided for the disease surveillance and control activities exclusively.

3. Bringing more communicable diseases under the risk protection scheme

The current scheme covers five communicable diseases – malaria, leprosy, acute respiratory tract infections, diarrhoeal illnesses and scabies. Other communicable diseases will also be covered as part of the strategic intervention for control of communicable diseases. A state working group with clinical, public health, health policy and health economics experts will be formed to develop a consensus list of diseases for adoption as policy within a stipulated period.

Specific interventions, resources convergence through disease control programmes and additional resource mobilization will be implemented.

The primary health care system will be strengthened for early diagnosis and treatment.

Other action points will follow the pattern adopted for introduction of the Panchabyadhi Chikitsa (5 Diseases Treatment) scheme.

Preventive and control measures against the diseases under the risk protection scheme will be augmented through specific interventions such as school scabies control programme.

4. Eradication of selected diseases

The state will strive to meet national goals for eradication/elimination or control of diseases as per the National Health Policy. Eradication of Yaws from Orissa will contribute to its eradication in the country. Selected diseases would be eradicated through state programmes as per the State Health Vision for 2010, even those not nationally targeted for eradication. Selection of diseases for eradication will be done by an expert group constituted for the purpose. A comprehensive, primary health care based approach will be used.

5. Mobilization of stakeholder support for disease control

Involvement of other systems of medicine such as homeopathy and Indian systems of medicine, voluntary and private health facilities will be ensured. Community efforts towards disease control will be facilitated and converged. The role of traditional healers will be recognized. Support from UN agencies, international donors and agencies will be coordinated to achieve the best results against those priority diseases as defined by the state.

Provisions of the Orissa Clinical Establishment Act and Orissa Medical Registration Act will be enforced meticulously, but in a facilitating manner to derive maximum co-operation and accountability of the private sector.

District health authorities will network with all health facilities operating in the district.

Increased partnership between the health department and professional bodies like the Indian Medical Association, the Indian Association of Paediatrics etc will be ensured.

6. Achieving better inter-sectoral collaboration for disease control

For more successful implementation of disease control programmes collaborative action within and between health and other line departments will be fostered. For water borne diseases collaboration will be with the water supply, drainage and public sanitation departments; for respiratory illnesses reduced indoor air pollution through better ventilation, smokeless stoves will be promoted etc.

Intradepartmental coordination mechanisms will be established between related disease control programmes. For example, the malaria and filariasis control programmes will evolve systematically into a vector borne disease control programme.

Task forces in the health department will be set up for related disease control programmes to delineate realistic inputs needed from other line departments to broaden disease intervention models from the current "medical" to an "ecological" focus.

After identifying inputs and essential collaborating departments, intersectoral coordination committees will be established, with thematic focus on control of water borne diseases, and food borne diseases etc rather than on individual diseases to achieve greater synergy.

7. Comprehensive health education and health promotion for disease control

Intensive financial and technical inputs alone do not guarantee success of an intervention. Good and sustained community mobilization is essential. Health promotion activities aimed at not only creating individual and community awareness, but also at fostering favourable attitudes and active participation in disease control programmes will be undertaken. Multi-media health education materials in Oriya that are situation specific, based on local needs and sensitive to socio-cultural values of the area will be developed and used, in partnership with NGOs, community based organizations, peoples health movements, traditional health practitioners and the private health sector.

Holistic approach to awareness creation will be adopted meeting the basic and essential health information needs of communities with specific information about different disease control approaches. Health workers will be equipped with effective person-to-person communication skills.

Health professionals will be trained in participatory community needs assessment, with skills to meet those needs in innovative and context specific ways. A critical number of experts in the health system will be developed with special skills in formulating and implementing health promotion strategies and media management.

A nodal agency/cell will be established in the health department to coordinate all health promotion activities.

Equal emphasis will be given towards "health rights and responsibilities" and "health needs", while creating awareness, encouraging people to actively seek and demand health services and intervention programmes and participate with responsibility and equality.

There will be active utilization of different approaches for health promotion activities including various forms of folk media, with a sustained involvement of media persons and other opinion makers so that they become catalysts of positive change.

SECTION 2

MALARIA CONTROL

A. Introduction

Malaria is the foremost public health problem of the State. Orissa contributes 23% of malaria cases, 40 % of PF cases and 50% of malaria deaths of the country. More than 60% population of the State is living in the malaria high risk areas, particularly in the tribal districts. Malaria problem in the tribal areas of the State is more but since the last few years the trend analysis of malaria

indicates that the incidence of malaria, particularly of PF cases is increasing in the non-tribal areas of the State as well. The urbanization and eco-environmental disturbances are the main factors contributing to the high incidence of malaria in the State.

B. Situation Analysis

Malaria control activities are carried out under the National Anti-Malaria Programme. The GOI provides support for the programme on a 50:50 basis. The entire quantity of anti-malaria drugs and insecticides are being provided by GOI. The State Government bears the incidental costs of transportation to districts and also cost of wages for spraying operations but due to inadequate and lack of timely release of funds, the activities planned are not being carried out satisfactorily. The programme is implemented in an integrated manner by the general health care system. Mainly two strategies are adopted for malaria control under the NAMP, i.e., prevention and treatment. Under prevention falls elimination of malaria parasites in human beings and control of mosquito population through spray of insecticides, use of bio-larvicides and personal protection from mosquito. For control of mosquitoes, selective and focal spray with DDT and synthetic pyrethroid is undertaken in areas with high malaria incidence. For treatment, emphasis is laid on early diagnosis and prompt treatment (EDPT) of malaria cases, all fever cases are presumptively treated with 4 tabs of chloroquine at DDC and blood slide are taken at health centers. Large numbers of vacancies exists in the cadre of MPHWS (M) and MPHS (M) in the general health care system, adversely affecting the malaria control activities in the field as well as supervision of spray activity. These need to be filled up.

The World Bank funded EMCP is in implementation in 158 out of 210 high risk blocks of the State since 1998-99. The project mainly places emphasis on early diagnosis and prompt treatment by establishing DDC in all the villages, engaging malaria link volunteers for PT and collection of slides, establishment of malaria clinics with microscopy facility, training of all medical and paramedical staff, selective vector control, distribution and use of medicated mosquito nets, mosquito control through larvivorous fish, IEC and intersectoral coordination. The EMCP has not so far been able to bring about a distinct decline in the incidence of malaria in the State.

C. Objectives

1. Improve implementation efficiency of the Malaria Control Programme.
2. Reduce morbidity and mortality of malaria by 50 percent by 2005.

D. Strategies

1. Improving the fund position for the programme from Government and private sector

GoI will be requested to provide 100% support to malaria control activities of Orissa in line with the north-eastern states of the country. Agencies like

Unicef, WB, WHO, Lepira, etc and national NGOs will be mobilized to extend their support for the programme so that the gap in funding position is bridged.

2. Strengthening of general health care system

The large number of vacancies in the cadre of HWs (Male) and HS (M) will be filled up by engaging leprosy paramedical workers in the vacant posts of HWs, and filling of supervisors' posts by promotion. All the staff of the general health care system will be oriented repeatedly on malaria control. The microscopic centres will be established at all PHC (N) by utilizing the services of laboratory technicians of leprosy programme, pharmacists and supervisors for malaria microscopy after adequate training. Surveillance system will be improved at PHC (N) so that early outbreak of malaria is identified and remedial measures taken. A continuous monitoring of malaria trend in every PHC (N) jurisdiction in high risk areas will be ensured.

3. Increased coverage

For early diagnosis and prompt treatment of malaria cases the functioning of the DDC will be improved. Every village and hamlet will have one DDC for distribution of chloroquine tabs to all fever cases in their area. Availability of drugs at DDC and its utilization will be ensured. Functioning of DDC will be placed under PRIs and community level NGOs for proper monitoring of DDC. All the system of medicines and traditional healers and chemist outlets will be identified to function as DDC for fever cases.

4. Integration of service

Integration of malaria control activities among medical colleges and PHC (N) and with other national programmes will be done. Malaria control activities will be also integrated with other developmental activities of different departments.

5. Training in malaria management

Adequate trainings will be ensured to all medical and paramedical personnel to identify complications of malaria and manage them quickly and properly at the appropriate level so that deaths due to malaria are brought down.

6. Selective Vector Control

Use of chemical insecticides for spraying will be phased out as the insecticides used for killing mosquitoes cause environmental hazards. However until the insecticides are completely phased out, these will be used selectively with greater involvement of PRIs. Proper planning and supervision of spray activities will be ensured.

7. Bio-environmental methods of vector control

Vector control through bio-environmental methods will be given more emphasis, particularly the use of larvivorous fish in the perennial water bodies. NGOs and PRIs will be encouraged to get involved in this.

8. Use of medicated mosquito nets

Distribution and use of medicated mosquito nets will be encouraged through social marketing of nets by identified NGOs.

9. Building up public awareness

Public awareness activities involving NGOs and PRIs will be carried out to bring behavioral change in the people particularly among tribal population.

10. Inter-sectoral coordination

Malaria is a multi-sectoral and multi-factorial public health problem. All the concerned departments will be involved from planning to implementation of anti-malaria activities in the field.

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CHAPTER 5.4

CONTROL OF NON-COMMUNICABLE DISEASES

A. Introduction

Non-communicable diseases (NCD) impair bodily structure and or function with long term, often life long effects with disability. These diseases require long-term care and management. Public health strategies for control of NCDs are twofold:

- a) to prevent or reduce risk factors through health promotion;
- b) to provide early diagnosis and management, as close to peoples homes as possible, with a referral system for persons with complications.

The Orissa burden of disease study reported 22% of morbidity being due to NCDs and 16% due to accidents and injuries. More prevalent NCDs include mental ill health; cancers; genetically linked blood disorders; diabetes; cardiovascular diseases including rheumatic fever / heart disease; chronic bronchitis and asthma; oral including dental diseases; ophthalmic / eye disorders; accidents and injuries.

B. Situation Analysis

Cancer: Increased life expectancy and exposure to toxic chemicals has made cancer a public health problem. Among females one third of cancers occur in the cervix, with the breast, oral cavity, ovary, uterus and gallbladder being the next most common sites. Among males 50% of cancers occur in the oral cavity, with the larynx, stomach colon and rectum being other sites affected. A large proportion of tobacco related cancers are reported across the country. This is a preventable cause of cancer accounting for about 50% of new cancers diagnosed.

Diabetes Mellitus: An ICMR study reports a prevalence rate of 5% among rural and 8% in the urban population of Orissa, with 95% being Type-II (genetically linked). 55% of diabetics develop ischaemic heart diseases, cardiovascular accidents, vascular thrombosis, renal failure, retinopathy, gangrene of the legs that adds to the morbidity, disability and mortality. WHO predicts a 170% increase in incidence in developing countries compared to a 42% increase in developed countries.

Cardiovascular Diseases including hypertension, coronary artery disease and rheumatic heart diseases: An ICMR study found a prevalence of 8% in the population of Orissa, with higher rates among males than females and lower rates among tribal people. Several studies find Indians / people of Indian origin more prone to heart disease, with the highest levels of blood lipoproteins regardless lifestyle, sex or age.

Mental Ill health: Epidemiological studies in India indicate that at least 2% of the population suffers from severe mental morbidity at a point of time (point prevalence). Additionally, at least 10% suffer from neurosis, alcohol and drug

addictions and personality problems. About 20-25% of outpatients presenting at general health services, such as Primary Health Centres come with psychosomatic symptoms or somatoform disorders resulting from emotional and psychosocial problems.

The trend of **Accidents and Injuries** is also rising and needs to be studied.

Oral health: The high prevalence of oral diseases is generally unrecognized with consequent low priority in health planning and financing. In other states periodontal disease affects 80-90% of the population resulting in early loss of teeth. Dental caries occurs in about 70% of children up to 12 years. Oral cancers affect 18-20 per 100,000 populations. Regular surveys are required to establish rates in Orissa.

Blood Disorders: Thalassemia and Sickle Cell Anemia are two common genetically linked blood disorders in Orissa. The former is prevalent in coastal districts and the latter in western districts including Kandhamal. Based on ICMR studies, an estimated 15 lakhs (15 hundred thousand) people in Orissa have the trait or the disease.

There is growing evidence that **environmental and occupational exposure to toxic substances** increases cancers, and disrupts the immune, reproductive and neurological systems, raising the prevalence of NCDs.

C. Objectives

By 2010 to substantially reduce morbidity, mortality, disability and suffering due to more prevalent non-communicable diseases and conditions. A public health approach will be used, aiming to reduce risk factors and increase access to care.

D. Strategies

1. Preventive measures for common risk factors including tobacco use and alcohol abuse.

Some preventive measures cut across disease groupings. For instance tobacco use is associated with 25 diseases including cardiovascular diseases, cancers of different types, chronic respiratory problems, impotence etc. Nicotine in tobacco is a potent addictive substance, making tobacco cessation difficult and placing this among mental health issues. Chronic tobacco use reduces life span by 15-20 years. Preventive measures include individual and community education, along with legislative and legal measures to control advertising, sponsorship and ultimately growth of tobacco, and reduction of the supply side. The Department of Health and Government of Orissa could support and implement measures suggested by the Tobacco Free Initiative of the World Health Organization which has been accepted by the Ministry of Health, Government of India.

Similarly community based approaches to reduction in alcohol abuse have long-term health and social gains in terms of several diseases (hepatitis, cirrhosis, cardiovascular, neurological and psychiatric).

- i) Health promotion will be introduced in schools and colleges and with the public to reduce tobacco use in smoked and chewed form. NGOs, Departments of Education and Publicity, Universities, management bodies of educational institutions will be involved, with the department providing a supportive environment for this to become a social movement.
- ii) Health promotion about ill effects of alcohol and substance abuse, healthy diets, hygiene including personal and reproductive hygiene, and exercise, with production of relevant health educational material.
- iii) Life skill education will be introduced for adolescent age children using, with necessary modifications, existing material and training modules. This helps children in developing self esteem, decision-making skills, handling peer pressure, etc. This is a primary preventive approach to many lifestyle diseases and mental health.
- iv) A core group will be set up to design health promotion and life skills education programmes, train trainers and implement programmes in collaboration with the education department.
- v) Introduction of yoga into educational institutions will be done in a phased manner, in collaboration with groups with the necessary skills.
- vi) Integrated community health approaches will be encouraged through NGOs.

2. Early Detection, Treatment, Disability Limitation and Rehabilitation Services

- i) The general health services, starting with district hospitals, will be strengthened and developed in a phased manner, for care of common non-communicable diseases. Secondary care institutions are referral centres and an effective referral system will be established. District programmes for major non-communicable diseases will be developed over time. All available technical and financial resources such as the National Mental Health Programme, Blindness Control Programme, and Diabetes programme will be effectively utilized.
- ii) Capacity building will be undertaken of a core group of young staff for a public health approach to non-communicable diseases, by sending them for training, workshops etc, followed by dissemination of knowledge and skills within the departmental staff. These staff will not be indiscriminately transferred.
- iii) Proformas, standard treatment guidelines for NCDs and referral mechanisms within blocks and districts will be developed.

- iv) At the appropriate time NCDs will be introduced into the Disease Surveillance System.
- v) Appropriate and relevant diagnostic facilities for NCDs will be made available at health institutions from district level to the periphery in a phased manner. Ultimately PHCs will be equipped to manage NCDs. PAP smear examination and Fine Needle Aspiration Cytology (FNAC) services will be available at all District Hospitals.
- vi) Centres of Excellence will be developed in different parts of Orissa, which will also undertake research. Like the Acharya Harihar Cancer Institute in Cuttack, centres for cardiovascular diseases, mental health and neurological sciences, a pathology referral centre and centre for blood disorders will be developed. Private sector support and participation will be sought for these institutions. Departments in the three medical colleges will be developed to become nodal centres. Qualitative and quantitative research into causative factors will be encouraged.
- vii) Emergency care centres will be established with trained personnel, infrastructure, equipment, ambulance services, communication systems and life saving drugs. They will cater to accidents and injuries, medical and surgical emergencies, obstetric emergencies, snake bites. They will also be part of the disaster preparedness network.
- viii) The role of Indian Systems of Medicine, Yoga, Homeopathy and non-drug therapies in non-communicable diseases is increasingly being recognized. Units will be established within district hospitals, so that diagnostic facilities and infrastructure is shared. The respective professional councils and practitioners from the private sector will be involved to update knowledge and skills.

3. Regulatory Measures

- i) In keeping with measures undertaken in other states and countries and with the developing international treaty through WHO titled, the Framework Convention for Tobacco Control (FCTC), necessary regulatory measures will be undertaken concerning tobacco eg. banning smoking in public places; banning chewed tobacco; etc.

CHAPTER 5.5

INTERVENTIONS FOR WOMEN AND CHILDREN

A. Introduction

Special attention will be given to improve the health status of women and children. Strategies will build on the Reproductive and Child Health programme (RCH) and the Infant Mortality Reduction Mission of GoO. Health needs of women as persons, in relation to their social status will be addressed and not just the reproductive aspects. Reviews will be conducted at regular intervals.

B. Situation Analysis

Orissa has poor development indicators on many fronts, including the highest infant mortality rate (IMR) in the country, as well as an unacceptably high maternal mortality rate (MMR). The IMR in 1999 was 97 / 1000 live births¹. The National Maternal Mortality Ratio was estimated at 437 / 100,000 live births², but extrapolating from the IMR, MMR in Orissa is over 700 / 100,000 live births. The Sample Registration System (SRS) in 1998 estimated the MMR in Orissa to be 361, which is lower than the national average, but is likely to be an underestimate. Maternal and child health care has been a priority of the State Health Department, but gains in child and maternal survival have not been as much as expected. Problems of access, availability and utilization of health services remain compounded by difficult terrain and cultural barriers in many places. Additionally, the status of women in Orissa, as reflected by the low literacy levels and limited autonomy, limits the care available to them. Social conditioning has resulted in a situation where 50% of women accept at least one reason for justifying a husband beating his wife³.

Orissa also has a high prevalence of malnutrition among women and children. 48.5% of adult women in Orissa are malnourished with a body mass index below 18.5, and this is the highest proportion of malnourished women in the country³. The same NFHS study shows that Orissa has the highest proportion of children who are wasted (24%), and the second highest proportion of children who are underweight (54%).

Anaemia, especially iron deficiency anaemia is very prevalent in the State (34% of pregnant women and 46% of children under 3 have moderate or severe anaemia). Iodine deficiency, as well as deficiency of vitamin A are also public health problems in the State.

¹ Sample Registration System, RGI.

² NFHS-1, 1992-93

³ NFHS-2, 1998-99

Survival of the mother is key to survival of the child. Motherless children, particularly girls, are less likely to get proper nutrition, education or health care as they grow up. Motherless children are 3-10 times more likely to die within two years when compared to children growing up with both parents.

The National Health Policy of 2002 spells out the objectives of achieving an IMR of 30 / 1000 and an MMR of 100 / 1000, to improve nutrition and reduce the proportion of low birth weight babies from 30% to 10% by 2010⁴.

The earlier Child Survival and Safe Motherhood programme, and now the Reproductive and Child Health Programme are interventions in the health department for reducing infant and maternal mortality. The State initiated Infant Mortality Reduction Mission⁵ aims to reduce IMR in Orissa from the current 97 / 1000 to 60 / 1000 by 2005.

C. Objectives

1. Reduce infant mortality from 97 / 1000 live births in 1999 to 60 / 1000 live births in 2005, and 50 / 1000 live births by 2010.
2. Reduce maternal mortality by 20% from the current level (470 / 100,000 live births, according to NFHS-1) by 2010.
3. Reduce incidence of Low Birth Weight by half of current levels by 2010 (NFHS-2) and subsequently to 10% by 2015.
4. Work towards achieving national nutrition goals (eliminate blindness due to vitamin A deficiency; reduce anaemia in pregnancy to 25%; reduction in chronic undernutrition and stunted growth in children; achieve universal iodization of salt to reduce iodine deficiency disorders to 10%).

(NB: While this will be covered in a separate chapter it is mentioned here because of its importance for health of women and children.)

Objective 1: Reduce infant mortality from 97 to 60 / 1000 live births by 2005 and to 50 / 1000 by 2010.

D1.Strategies:

This is essentially an inter-sectoral approach. Good antenatal care, skilled birth attendance and access to emergency obstetric care will also be strengthened through consolidation and expansion of current initiatives.

1. Malaria chemoprophylaxis of pregnant women

- i) Protecting all antenatal mothers from malaria through weekly prophylaxis with chloroquine, in order to reduce maternal anaemia and / or death; as well as to reduce incidence of low birth weight among the newborns. This will be done through close co-operation between the ANM and anganwadi worker at field level.

⁴ Draft National Health Policy, 2001; MOHFW

⁵ Infant Mortality Reduction Mission, Government of Orissa, 15th August 2001.

2. Improved newborn care

- i) At community and institution level, undertaking training, equipping frontline workers, and educating the community on essential newborn care, with focus on care of the low birth weight baby and early recognition of danger signs, will be the mainstay of this strategy.
- ii) This will be coupled with simultaneous strengthening of institutions (at all levels) to deal with sick newborns who are brought to the facility.
- iii) Medical audit of infants deaths will be instituted in order to improve childcare services.

3. Encouraging institutional deliveries

- i) In order to have skilled attendance at delivery, transport costs for institutional deliveries, as well as actual costs for conducting a normal or caesarian delivery will be met by the Government, so that financial barriers to seeking institutional delivery care will be reduced.
- ii) Ongoing training and supervision of dai's and provision of dai kits.
- iii) Involvement of private sector obstetricians and anesthetists, and NGO health institutions.
- iv) Continuing skill based training of ANM (Multipurpose Health Worker Female MPHWF – F).

4. Community education for more involvement in maternal and child health services

- i) Information sharing and empowerment training about maternal and child health issues with the PRI members and SHGs. Encouraging their active involvement in supervising and participating in primary health care services.

5. Health services for the urban poor and migrant populations

- i) These are the most vulnerable people, and with increasing urbanization there is growth of slums as well as increase in numbers of migrants at work sites. Special attempts will be made to provide services to these populations through promotion of primary health care services, mobile services, community based workers, and contracting additional staff. This will need collaboration with the Urban Development Department.
- ii) Innovative approaches to reach street children and child workers will be supported through NGOs.

Objective 2: Reduce Maternal Mortality Rate by 20% of current levels by 2010.

D2.Strategies:

1. Care for adolescent girls and boys

- i) Address issues of adolescent anaemia through strategies for prevention and treatment for girls in school as well as those out of school.
- ii) Ensure maximum possible coverage with Tetanus Toxoid at 10 years and at 16 years.
- iii) Life skills education for girls and boys will be introduced on a pilot basis with NGOs and the Department of Education and later expanded.

2. Improve coverage and quality of antenatal care

- i) Improve skills of service providers in antenatal care and equip them suitably.
Regular refresher training and proper supervision are essential for this.
- ii) Awareness generation about the need for ANC – involvement of families and the community for providing proper care to the pregnant woman.
- iii) Identification of risk factors and early referral – community education as well as training for frontline functionaries and TBAs on recognition of danger signs during pregnancy and prompt referral, will need greater focus.
- iv) Advice on food and rest – through counseling of antenatal women and families.
- v) Food supplementation through ICDS.
- vi) National Maternity Benefit Schemes (NMBS) – aim at improving efficiency of coverage with this scheme, to ensure that the benefit does reach the woman when she is still pregnant.
- vii) Increase coverage through outreach services – provided services to difficult to reach areas through mobile clinics, and through a team, rather than an individual health worker. Detailed micro plans to be worked out for this.

3. Provide skilled birth attendance

- i) Train ANMs to handle obstetric emergencies – refresher training to ANMs and providing them with the appropriate skills for detection and early referral of complications, after providing obstetric first aid.

- ii) Encourage deliveries only through skilled birth attendants either at home or in an institution. Ensure that all block level health institutions and above provide 24-hour delivery services.

4. Provide Emergency Obstetric Care

- i) Ensure that the identified First Referral Units (FRUs) are fully functional as Comprehensive EOC facilities, and are accessible as per norms.
- ii) For every block, ensure that there is at least one functioning basic obstetric care unit which provides – injectable antibiotics; injectable oxytocics; injectable anticonvulsants; manual removal of placenta; removal of retained products; and assisted vaginal delivery.
- iii) Train doctors through short courses in anaesthesia administration to assist in emergency obstetric care.
- iv) Ensure provision of obstetric first aid by adequate training to TBAs and ANMs.
- v) For every 5,00,000 population there will be at least four basic emergency obstetric care facilities and one comprehensive emergency care facility. At least 15% of all births would be expected to occur in these facilities, with a case fatality rate of less than 1%. Caesarian sections will account for not less than 5% and not more than 15% of all births in the population.

5. Postnatal care

- i) Ensure that every woman who delivers is visited at least once during the first postnatal week (both to check on the mother as well as the newborn), either by ANM or Anganwadi worker, or both.
- ii) Educate and support mothers for exclusive breastfeeding.
- iii) Train health workers to recognize and treat post-partum infections, and to refer those cases that are not responding to their treatment.

6. Provide safe abortion services

- i) All block PHCs to provide MTP services including counseling after adequate training of doctors, provision of adequate equipment, and with proper supervision, follow-up care to be ensured
- ii) Selected single doctor PHCs may be declared MTP centres depending on well-defined criteria.
- iii) Generate awareness on the need for safe abortions and the dangers of illegal abortions.

- iv) Education on contraception to avoid abortions being used as a contraceptive measure.
- v) PNDT Act will be implemented, avoiding selective abortion of unborn girls.

7. Medical audit of maternal deaths

- i) Audits will be conducted at all institutional levels, for learning from these occurrences, to improve quality of care and reduce maternal deaths.

Objective 3: Reduce incidence of low birth weight by half of current levels by 2010

D3,Strategy:

1. Reduce anaemia among adolescents and women of reproductive age

- i) Iron supplementation and treatment of anaemia in pregnancy.
- ii) Presumptive deworming in the 2nd and 3rd trimester of pregnancy.
- iii) Promote weight gain of pregnant women.
- iv) Prevention and treatment of anaemia in adolescents through iron and folic acid tablets, antihelminthics and dietary advice.
- v) Protection of pregnant women against malaria through chemoprophylaxis as well as use of mosquito nets.

Objective 4: Work towards achieving national nutrition goals

Iron deficiency leads to lower learning capabilities in children; complications in pregnancy and childbirth, and to low birth weight babies. The main causes of iron deficiency anaemia are poor intake of iron in the diet, poor absorption, as well as blood loss due to hookworm infestation and malaria.

Iodine deficiency leads to lowered IQ in children, and impaired learning. It can cause reproductive loss with miscarriages and stillbirths, and during pregnancy can lead to cretinism in the child. A countrywide survey showed that no State is free from Iodine Deficiency Disorders.

Vitamin A protects not only against night blindness, but also against diarrhoea and pneumonia in young children. Therefore, in addition to dietary intake, supplementation every six months is essential.

D4.Strategies:

1. Regular supplementation of vitamin A, and health education regarding vitamin A rich foods.
2. Public education regarding need for iodized salt use.
3. Education regarding early and exclusive breastfeeding (including benefits over artificial feeding) and initiation of complementary feeding at 6 months.
4. Universal coverage with immunization to prevent post-measles diarrhoea, pneumonia and other infections, as well as precipitation of malnutrition.
5. Prevention, early diagnosis and prompt treatment of diarrhoea and ARI.
6. Prevention and treatment of iron deficiency anaemia in children, including education regarding personal hygiene and sanitation, and nutrition education.

Details and action points are discussed in the section on Nutrition.

Objective 5: Improve women's health**D5.Strategy**

1. Increase women's access to good quality gender sensitive health care, for comprehensive health needs

- i) Avail of all central assistance including through the RCH programme special envelope etc., for infrastructural development, training and staffing, especially of sub-centres and PHCs.
- ii) Train PHC and other staff to recognize violence against women, to care for mental health problems faced by women, to manage non-reproductive health problems faced by women, to be familiar with drug dosages in relation to different physiological states of women, to establish gender disaggregated recording and reporting systems.
- iii) Ensure that the coverage of women under non-reproductive health programmes steadily increases. Gender disaggregated data will be maintained and analysed for this purpose.
- iv) Gender sensitive care will include privacy, confidentiality and counseling of the family.
- v) Incentives to women health professionals and workers to serve in rural areas by providing quarters, mobility, safety and continuing education regarding women's health.
- vi) Increase in the number of trained nurses working in CHCs and in a phased manner in PHCs. Providing special training to nurses in obstetrics and public health.
- vii) Providing support to women's health empowerment training programmes through NGOs, SHGs, Mission Shakti, developing upon existing modules and material already available. Increase self-

reliance, self-confidence and self-esteem of women including in their role as healers in the family.

Objective 6: Improve health of school aged children

D6.Strategy

A comprehensive approach through inter-sectoral collaboration with Departments of Education, Women and Child Development, NGOs and the community to reach children in and out of school.

- i) Strengthen the school health programme with emphasis on health promotion and health education activities.
- ii) Initiate life skills education, initiate a training of trainers.
- iii) Develop mechanisms to reach out of school children through NGOs, schools and school teachers, women's groups.
- iv) Depute staff for training in school health, child-to-child programmes, life skill education and health promotion.

CHAPTER 5.6

POPULATION ISSUES AND REPRODUCTIVE HEALTH

A. Introduction

Since 1901 the population of Orissa has more than tripled. According to Census 2001, the population of Orissa was 36.7 million. The decennial growth rate of population between 1991 – 2001 is 15.94 percent, significantly lower than the estimated national increase of 21.34 percent. The age distribution of Orissa is typical of high fertility populations, with 33 percent below age 15 and 6 percent at 65 years and above (NFHS 2, 1999).

B. Situation Analysis

1. The Total Fertility Rate (TFR) of Orissa was already much lower in 1975 compared to other low – income states (4.6 as against all-India average of 4.9). By 1993, the TFR of Orissa was significantly lower than other low-income states and the all India average (2.9 as against 3.4 for all India). This is reflected in the decadal growth rate of population during 1981 – 91 (19.53 percent) and 1991 – 2001 (15.9 percent). According to Visaria (2001), the net inter-state migration (in terms of persons reporting a place of last residence different from the place of enumeration) was slightly positive but insignificant in influencing the population size or growth both during 1981 and 1991 censuses. Thus, contrary to popular belief there isn't a significant net out-migration from the state to other developed regions of the country.
2. The fertility of Oriya women is lower than the all India estimates. The NFHS-2 estimated the Orissa TFR at 2.5. This suggests that Orissa needs to reduce its fertility by only about 15 percent in order to reach the replacement level fertility of 2.1. Interestingly, all population groups have recorded a decline in fertility compared to NFHS – 1 and differentials have narrowed. This augurs well for the goal of attaining population stabilization sooner rather than later.
3. Orissa is poised to attain **replacement level** of TFR of 2.1 during 2011 – 2016, ahead of the BIMARU states and Gujarat, Punjab and Haryana. Nonetheless, the projected IMR of Orissa (84) would be high and the projected level of life expectancy at birth (62.5) at this point would be the lowest, except MP. At this point, the natural rate of growth of population of Orissa (1.55 percent per annum) would be lowest, but for Kerala and Tamil Nadu. This is a result of a relatively gradual decline in mortality rate and a relatively rapidly declining birth rate (see Padhi and Mishra, 2000).
4. The population density is 236 (Census 2001), lower than the estimated national average of 324 persons per square kilometers. Orissa lives in its villages, with an 87 percent rural population. Although the average population per habitation had more than doubled over the period 1961 to

1991 (from 354 persons per village in 1961 to 884 in 1991), its average village population was the fourth lowest among the major states of India. Further, 61 percent of villages in Orissa had populations less than 500 persons. Except Himachal Pradesh, no other state had such a large proportion of relatively small villages.

5. In Orissa, according to one report, there is a high incidence of **spontaneous abortions**¹. – an indicator of pregnancy wastage and a possible contributor to perinatal and maternal mortality (Padhi and Mishra, 2000). One reason for the high incidence of spontaneous abortions and the high MMR is the poor nourishment of women and high prevalence of anaemia.
6. According to a **population projection** by Prof. Visaria, the doubling of the population in Orissa to about 60 million in 2101 is certain, due to an in-built momentum, even if the Total Fertility Rate (TFR) were to reach replacement level between 2011–16. The in-built momentum of growth on account of current levels of fertility, would account for nearly 78 percent of the population increase. Unwanted fertility in the total expected population growth is expected to be 19 percent and high-wanted fertility is estimated to be only 2.5 percent. Disasters and epidemics such as HIV/AIDS will also have an effect on mortality.
7. Based on indicators such as sex ratio, literacy rate, work participation, poor nutrition and health the **status of women** in Orissa is considered low. The sex ratio of Orissa declined from 1022 (1951) to 971 (1991) and 972 (2001). The sex ratio for 0–6 years declined from 967 in 1991 to 950 in 2001 (estimated). However, the sex ratio of Orissa is comparable to some demographically developed southern states. It has an equitable gender balance in the SC population, and tops the list in sex ratio amongst the ST population (Rustagi, 2000). Compared to other parts of India, there is not a strong son-preference in many parts of the state. The status of tribal women is considered to be relatively better than that of women in coastal districts.
8. The state is finalizing a **policy for women**, the main goals of which are: ensuring the right to survival of all female life at all stages; preventing atrocities against women and adolescent girls; ensuring equal access to nutrition and health; proactive measures to improve the status of women; and enabling equal access in all public forums. Self Help Groups (SHGs) especially with women have been formed under various schemes, supported broadly by the Mission Shakti programme.
9. Women in Orissa marry relatively late, compared to many other parts of the country. The average age at marriage for women is 19.8, higher than the national average. There are however, regional variations and the age at marriage is low in tribal districts (RCH Data). According to NFHS2, 17 percent of the women of age 15 – 19 are already married. The survey indicates that proportion of women who marry young has been declining rapidly.

¹ Number of cases of spontaneous abortion (OPD+IPD) for the year 1992 – 93 is reported to be 25, 107. Relative to the reported number of births in 1993, the incidence of spontaneous abortions works out to a high of 40.62 (25,107 divided by number of live births+ still births multiplied by 1000.) It must be noted that the estimate pertains only to attended cases of spontaneous abortion.

10. **Increased violence against women** is reported with 29 percent of women in the state experiencing domestic violence (NFHS 2). Police records confirm field impressions. Though majority of cases reported relate to rape, most go unreported. Increasing number of desertions is reported in family courts organized in some districts.
11. **Literacy:** 63.61 percent of the total population in the state is illiterate - male 75.95 percent and female 50.97 percent (Census 2001). Between 1991 and 2001 female literacy has improved, confirming 1997 NSSO survey findings. Evidently, more women are coming forward to learn. However literacy in the tribal districts, especially amongst tribal women is, abysmal. Despite increased number of literates, especially women literates, it is estimated that *mean years of continuous schooling in the state is only 2.42 years*, much lower than the four years regarded as minimum for effective literacy.
12. **Adolescents** are relatively ignored. Adolescents' needs are often met through programmes of the WCD and Education department. Efforts are on by the Government to initiate a Kishori Shakti Yojana in the state.
13. **Reproductive Health Services:** According to NFHS 2, 47 percent of currently married women currently use some method of contraception, up from 36 percent in NFHS 1. The Contraceptive Prevalence Rate (CPR) in the state is 46.8, higher in urban (54 percent) than rural (46 percent) areas, and higher among high school educated women (52.7 percent) than those illiterate (45.2 percent). Current use of contraception is lower among scheduled tribes compared to other women. Female sterilization is the most widely used method - accounting for 76 percent of total contraceptive use. In NFHS 2, only 2 percent of women reported their husbands were sterilized, down from 3 percent in NFHS 1. Oral contraceptives, intrauterine devices and condoms account for 10 percent of total contraceptive use.
14. Given the emphasis on sterilization, most women adopt family planning after achieving the desired family size. Contraceptive use rises with age, peaking at 69 percent for women age 40 - 44. Use also rises with number of children, peaking at 68 percent for women with three living children. Son preference does appear to affect contraceptive use.
15. Sixteen percent of currently married women in Orissa have an **unmet need** for family planning, that is, they are not using contraception even though they do not want any more children or want to wait at least two years before having the next child. The unmet need for spacing is slightly higher than the unmet need for limiting. The current programme emphasis on limiting methods is therefore not effective in meeting the needs of young married couples who would like to space their births.
16. **The public sector** is the most important provider of contraceptive care in Orissa with government providing for over 90% of users. Private sector medical institutions provided methods to 6 percent, and 4 percent obtained supplies from a shop. Exposure to mass media is low in Orissa.
17. Despite being a significant milestone, the National Population Policy (2000) does not mention **reproductive rights**. The policy has been criticized for excessive reliance on goals rather than rights, despite obligations assumed by India under various human rights covenants and the CEDAW (convention on elimination of all forms of discrimination

against women). Reproductive rights, the foundation of the International Conference on Population and Development, Programme of Action, needs discussion at different levels.

18. **Incentives and disincentives:** The NPP 2000, does not have disincentives for family planning, but relies heavily on incentives. In Orissa there are few incentives to motivate internalization of the small family norm. The most popular was the green card for couples sterilized after one or two children. Interest in obtaining green cards by those eligible is waning, probably with the realization that any benefits are spread very thinly (Alison Dembo Rath 2002). The major disincentive provision rendering persons with more than two children ineligible to contest the Panchayat Elections has strong support amongst politicians and administrators (Buch/UNFPA 2001) though women and human rights groups contest this. However, from Visaria (2001) and NFHS 2, high wanted fertility is not an issue in Orissa and there is a significant degree of internalization of the small family norm.

C. Objectives:

Population stabilization strategies are seen in a broader health and development context. In Orissa, a strategy to increase the pace of decline of TFR is not required. The small family norm has been largely accepted and internalized.

The objectives are (1) to reduce the pace of the momentum of population growth, given the young age distribution of the population, to increase access to spacing methods and provide good quality contraceptive care, and (2) to improved health and access to care which is integral to population stabilization.

D. Strategies

1. Increase synergy between population and health policies

Access to reproductive health services depends on a functioning, accessible and affordable health care system. Hence, the population policy will be part of a comprehensive health policy and of larger efforts at reforming the health system. Separation between the two could lead to distortions. The need for equity with efficiency, the possibility of health insurance to include the poor, the stagnation in the rate of decline of infant mortality, and the need to address maternal mortality in a time-bound manner are some of the issues that need to be addressed commonly by both the health and population policies.

Many aspects of the health strategy address the need for better health care. Support from the RCH programme will be used towards this. Closer integration between RCH and total health service functioning will be implemented covering training, job responsibilities and service delivery.

Strategies for reducing maternal mortality are given in the Chapter on Intervention for Women and Children.

2. Meeting unmet needs for contraception, especially spacing

According to NFHS 2, "the almost exclusive emphasis of the family planning programme on sterilization fails to meet the needs of young women who are still in the process of family formation. Many women couples have an unmet need for spacing, especially before their first and second births"

Spacing needs will be met by increasing availability of good quality contraceptive care in primary health care units, through non-traditional outlets and community based distribution and information systems. Community awareness and health personnel knowledge about these methods will be increased. Health services will be strengthened for proper screening, handling of side effects and follow-up services. This will be introduced in a phased manner in different districts with technical support from medical colleges, district hospitals and specialists from the private and voluntary sector.

Promotion of condoms as dual protection methods will be undertaken in view of the emerging problem of HIV/ AIDS.

The range of services and method choice will be expanded to enable men to shoulder part of the burden of RH, and to cater to their reproductive and special health needs.

3. Improving quality and range of reproductive health services

The Health and Family Welfare Department will further the efforts to achieve better quality of care. Patient and community feedback will provide indicators of achievement. Quality includes adequate access and availability; routine and reliable information on the scope of services and what is available at which level; a range of contraceptives; and technical quality of care. The latter includes the infrastructure and service environment; privacy and confidentiality; waiting time; inter-personal relationships and follow-up.

Education and empowerment training on reproductive health aspects will be integrated into health promotion activities with women and men, adolescent boys and girls.

Community Needs Assessment (CNA) was meant to decentralize target setting and planning. However, CNA has had limited use and that too mainly for contraceptive target settling. Through training and supervision it will be ensured that CNA is used as an effective planning tool to enable "community" involvement besides needs assessment.

Ensuring accountability of service providers to the community The department will facilitate creation of meaningful linkages between the community and health service providers to improve the utilization of public services and also to enable the accountability of service providers to users/clients. Besides training the community members, SHGs to participate, the service providers should be open and willing to work with the community. The recent effort of the health department requiring the ANM to participate in Panchayat meetings is one such step.

Life cycle approach: The Department of Health will begin to address the reproductive and health service needs of married and unmarried adolescent girls and boys, and older women and men outside the reproductive age groups.

Integrated approach to HIV/AIDS, STDs and RTIs: The HIV/AIDS programme is managed by a separate society and the Department of Family Welfare addresses all other reproductive and sexual health needs. A convergence between the two will be established

Management of Infertility will be integrated into the existing reproductive health services in a phased manner.

4. Strengthen reproductive rights, women's empowerment, gender, equity and male involvement

Initiatives will be taken to further the understanding of reproductive rights and NPP 2000 among policy makers, stakeholders (including corporate sector), health providers and the community. Discussion will be regarding the on-going fertility transition in the state, its policy implications, and the need for broad public support for an approach based on rights, health, and women's empowerment. The best way to reduce momentum of population growth is by increasing girls' education and women's empowerment. Unwanted fertility can be decreased by increasing women's control over reproductive decisions and improving the quality of family planning services; and wanted fertility reduction depends among other things on greater knowledge and awareness of FP methods.

Policy support for gender equality, women's empowerment and male involvement: Proactive efforts will be made to mainstream an approach based on gender equality and women's empowerment into the functioning of the Health and Family Welfare department. The long-standing target based approach has influenced the majority of policy makers, programme managers, supervisors and staff. Often, male contraception and / or sterilization and short training courses on gender sensitization for service providers are viewed as support for gender equality. A more systematic and well-planned mainstreaming strategy will be evolved to shift provider mindsets from a biomedical to a rights – based perspective. A gender desk may be considered.

A public campaign against son-preference and sex – selection: Although not a major issue in the state at present, a campaign with innovative media work

will cover health professionals, administrators, community leaders, religious groups etc. The PNDT Act will be implemented.

Through training and support the involvement of health service providers in identifying victims of violence against women, counseling, support and treatment will be undertaken.

5. Life-skills education in schools for adolescents

Life skills education will build on WHO modules and Indian experience using a phased approach with teacher education, community and parent sensitization. It is a primary prevention approach helping formation of young persons in decision making, handling peer pressure, developing self-esteem. These help develop responsible life styles and sexuality, increased gender equality and reduced gender violence.

There will be coordination with the Department of Education and NGOs.

CHAPTER 5.7

HEALTH CARE OF SPECIAL GROUPS

Many special groups require special care and attention. These groups are disadvantaged and underprivileged. Their access to and utilization of health care services are poor, because of sociocultural, geographical, economic and other reasons. Such groups include the aged, street children, working children, persons with disabilities, the tribal people, nomads, migrant labour, commercial sex workers, urban slum dwellers, prisoners and others. Together, they constitute a sizeable proportion of the total population.

The Directive Principles of the Indian Constitution (Article 42) states: *"The State shall, within the economic capacity and development, make effective provision for securing the right to work, to education and to public assistance in cases of unemployment, old age, sickness and disablement and in other cases of undeserved want"*.

An important goal of the health care system is to achieve equity in health, irrespective of the situation in which people find themselves. It is imperative that we formulate and implement earnestly policies, strategies and action plans to improve the health of people belonging to special groups or people with special needs. Though all special groups are important, strategies for improvement of health with respect to the **elderly, persons with disabilities and tribal persons** are dealt with here. The State will encourage civil society groups including NGOs and community based organizations to work with special groups.

Section 1:

THE ELDERLY

A. Introduction

The life expectancy at birth of the people in India has increased from 32 years at the time of Indian Independence to over 60 years in the nineties. People live longer. The number of the elderly (60 years and over) has increased from 12 million in 1901 to 57 million in 1991. Population projections made by the Registrar General of India indicate that the number of the elderly would be about 100 million or 7.97% of the total population by 2016. Nearly 85% of the aged population belong to the age group of 60 – 70 years; their needs for health care are different from those above 80 years. The age distribution, gender and economic situation relevant to the elderly call for special provisions for health care. The high proportion of elderly widows in rural (63.89%) and urban (61.38) settings call for special care. The estimated proportion of the elderly to the total population in Orissa in 2011 is 8.84%

Health care needs increase with age. Considering the social, economic and psychological needs of aged people, a family based health care system is probably the most effective and satisfying strategy to be adopted. However, since such a system is getting eroded due to changes in culture, behaviour patterns and life styles, other strategies by the State must be thought of. There is also a steady decline of the productive population, giving rise to a more dependent population.

Drug therapy in the elderly can cause problems. They often have multiple pathologies, leading to consumption of more drugs, with the risk of developing adverse side effects and drug interactions. Further, they may fail to comply with drug regimens. There are also variations in the normal patterns of drug kinetics and dynamics. There may be greater vulnerability due to loss of reserve functional capacity of the heart, liver, kidneys and other organs.

Elderly people are lonely, leading to psychosocial and emotional problems, which are misinterpreted as diseases with unnecessary drug administration.

B. Situation Analysis

The percentage of the elderly in Orissa is increasing, as in the rest of India.

Year	Orissa	India
1971	6.02	5.97
1981	6.26	6.28
1991	6.98	6.58
2001	7.74	7.08
2011	8.84	8.18
2021	10.60	9.87

(Date based on Census and projected)

If we look at percentage of persons currently married and widowed, wide differences between males and females indicate a larger number of single widowed females.

Percentage of the elderly, 1991	Male	Female
Currently married	76.4	60.0
Widowed	18.1	39.5

C. Objectives

(a) To facilitate the provision of health care services to the elderly at affordable cost, as near the person as possible, through the primary health care system.

(b) To facilitate provision of psychological support and adequate nutrition for the elderly.

D. Strategies:

1. Planning and review of health services for the elderly

- i) Study existing patterns of health care for the aged at family, community and government levels and implement needed reforms.
- ii) Develop a reliable database on the health status, morbidity and disability in terms of gender, locality and socio-economic status of the elderly in the State.
- iii) Use services of the elderly in micro planning, implementation, monitoring and evaluation, considering the elderly as a valuable human resource and appropriate utilization of their potential.

2. Sensitize the public, voluntary and private health care services to be responsive to the needs of the elderly

- i) Strengthen primary health care and referral systems (secondary health care) with facilities and logistics for managing health disorders of the elderly, especially non-communicable diseases, such as cardiovascular, respiratory and nervous disorders, old age cataracts, psychological and mental infirmities.
- ii) Advocate for active ageing through health promotion.
- iii) Include gerontology and geriatrics as subjects in health professional education.
- iv) Training and re-orientation of health personnel in health and medical care of the elderly.
- v) Providing single point counters/ mechanisms for elderly patients in public hospitals, to reduce or avoid long waiting time and multiple trips (general practice units).
- vi) All buildings including health care institutions to have easy access for the elderly.
- vii) Private and voluntary health care institutions to be encouraged to provide appropriate treatment for the elderly.
- viii) Care and rehabilitation services for the elderly with disabilities.
- ix) Legislation may be considered to ensure that the family takes the responsibility of looking after the elderly (parents) in the family (e.g., the Himachal Pradesh Maintenance of Parents and Dependents Act).

Section 2:

PERSONS WITH DISABILITIES

A. Introduction

Persons with disabilities have reduced or total loss of one or more bodily or mental capacities. Disabilities include, among others, locomotor disability, visual impairment, hearing and speech impairment, mental illness, mental retardation, learning disabilities and multiple disabilities (as in the case of cerebral palsy). The disabilities may be mild, moderate, severe or profound. It is estimated that persons with disabilities (excluding the mild) constitute about 3–4 percent of the population in the country.

Many disabilities are caused by preventable conditions. These include infections, consanguinity and accidents. Immunization against poliomyelitis has reduced locomotor disabilities. Genetic counselling can reduce some of the hereditary illnesses leading to disability. Wearing helmets by two wheeler users can reduce brain injury.

Most of the earlier efforts for rehabilitation of persons with disabilities were through the establishment of special institutions. But the impact was limited; the coverage was small; there was segregation; and it was costly. More recent efforts are through promoting community based rehabilitation (CBR).

"Community Based Rehabilitation is a strategy within community development for the rehabilitation, equalization and social integration of all people with disabilities. CBR is implemented through the combined efforts of disabled people themselves, their families and communities and the appropriate health, education, vocational and social services."

ILO, WHO, UNESCO, 1994, The Joint Declaration, Geneva.

CBR seeks to encourage universal coverage and integration, through the combined efforts of all concerned at an affordable cost.

Favorable behavioural changes (a positive attitude) are needed, both among the general population to persons with disabilities and within themselves.

B. Situation Analysis

There are government and voluntary institutions providing rehabilitation services in Orissa. These include NIRTAR, Chetna Centre for Education of Mentally Retarded Children, Special Employment Exchange for the Physically Handicapped, and Vocational Rehabilitation Centre for the Handicapped. All of them are situated in Bhubaneswar. The Regional Spinal Inquiry Centre (govt.) and Shanta Memorial Rehabilitation Centre (voluntary) have also developed. However these efforts are insufficient to meet the needs.

C. Objectives

General

To improve the physical, mental and social well being of all persons with disabilities, developing them to their fullest potential, through support to a range of services in the public, voluntary and private sector.

Specific

1. To increase services for prevention, early detection, appropriate interventions and rehabilitation for persons with disabilities.
2. To introduce Community Based Rehabilitation programmes in different districts.
3. To support education and training of persons with disabilities to become productive members of society.

D. Strategies

These will be initiated at district and later taluk level and in towns. Spread of services will occur incrementally.

1. Improve access to a range of services

- i) The Department of Health will undertake and support prevention, early detection and interventions (surgery, physiotherapy, use of medicinal drugs, etc). Health workers will be sensitized, trained and supervised in the identification, care, record keeping and referral of persons needing rehabilitation.
- ii) The department will reduce barriers to access to its buildings, transport, etc. It will work towards reducing psychological and social barriers.
- iii) It will increase participation of people with disabilities in planning and reviewing its services.
- iv) It will support Community Based Rehabilitation (CBR), ensuring availability of suitably trained manpower. There is need for institution-based rehabilitation for persons with profound disabilities (special schools and hostels). It will work with social agencies and self-help groups to promote independent living.
- v) Initiate and spread basic rehabilitation services at the community level.
- vi) Encourage voluntary organizations to have CBR programmes, especially in rural areas. Develop partnership between the public and voluntary sectors.
- vii) Develop orthotic and prosthetic centres at district hospitals, where feasible, ensuring their effective functioning, and seeking support from specialized donor agencies.

- iv) Distribute appropriate, low-cost aids and appliances, utilising local materials and skills, to meet the needs of the persons with disabilities; ensure their maintenance and repairs.

2. Strengthen supportive action

- i) Ensure that all the provisions in the "Persons with Disabilities Act, 1995" are carried out fully by the Government. Recognise and protect the rights of persons with disabilities, to lead a fulfilled and productive life.
- ii) Creation of a reliable database of persons with disabilities, disaggregated according to the type, severity, age, gender, region, etc. This will be carried out through detailed surveys.
- iii) Undertake public awareness programmes through the media, educational institutions, NGOs and community groups to change attitudes of people with disabilities towards themselves and attitudes of the public to people with disabilities.
- iv) Increase inter-sectoral co-ordination between health, education, vocational training, and labour and welfare sectors.

Section 3:

TRIBAL PEOPLE

A. Introduction

Tribal persons face a double burden of social isolation and poverty. Orissa has a tribal population larger than the national average. They constitute 8% of the country's population and 22.21% of the State's population. Tribal persons have worse health outcomes, and less access to health care. The tribal people suffer disproportionately more from pre-transition diseases, such as malaria, sexually transmitted diseases and tuberculosis. Genetic diseases, nutritional deficiency diseases, G6PD deficiency disease and sickle cell anaemia are specific to them. When hospitalized, they spend more than half of their annual expenditure for health care services; 45% of them borrow money or sell assets to cover the expenses and 35% fall below the poverty line.

Low awareness of ill health and health seeking behaviour are important barriers to maintaining health. The tribal people rely mainly on traditional healing systems.

Alienation from forest resources for livelihood; exploitation by the non-tribal; deforestation and various 'development' works further deteriorates their health status.

B. Situation Analysis

The health indices of the tribal population are worse than the national average: Infant mortality rate: 84.2; under- five mortality rate: 126.6; children underweight: 55.9%; anaemia in children: 79.8% children with recent acute respiratory infection: 22.4%; children with recent diarrhea: 21.1%; women with anaemia: 64.9%. A high incidence of malnutrition is seen in Phulbani, Koraput and Sundergarh districts.

C. Objectives

1. Improve the health status of the tribal population, reducing progressively morbidity and mortality rates.
2. Protect the tribal people from the adverse financial effects of problems relating to health and access to care.
3. Respond to the health needs and demands of the tribal people adequately.

D. Strategies

1. The health department will facilitate tribal specific studies and planning processes

- i) The department will undertake or commission surveys of health status; health care needs assessment of tribal people; availability, accessibility and utilization of present health services; constraints to effective utilization; and studies of nutrition status and diet of tribal people.
- ii) Prepare tribal specific health plans including the financial component.
- iii) A participatory approach will be used to develop and implement strategies with tribal elders and councils. Annual reviews will be undertaken and reported.

2. Increase access to health care

- i) Establish sub centres and primary health centres, together with residential accommodation, as per norms for tribal areas, considering geographical barriers. Develop a working referral system with provisions for transport / mobility/
- ii) Fill up all posts of health personnel in tribal areas, giving preference to local persons, inducted by training. Tribal girls to be selected with relaxed entrance criteria, trained as ANMs and posted to tribal sub centres.
- iii) Encourage traditional healing systems. Integrate modern medicine and traditional systems. Promote medicinal herbal gardens.

- iv) Study specific tribal diseases and their management – sickle cell anaemia, G6PD deficiency, etc.
- v) Mobile health units will be made fully functional.

3. Address determinants of ill health through inter-sectoral coordination

- i) Provide potable water supply and sanitation and waste disposal.
- ii) Initiate culturally relevant health promotion and nutrition education; promote kitchen gardens.
- iii) Address the issue of alcohol abuse through community health and development approaches, and negotiate policy aspects with government.

CHAPTER 5.8

PUBLIC HEALTH REGULATIONS

A. Introduction

The Constitution of India provides for protection and improvement of public health. Article 47 states *"The State shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties---*". Legislation helps in protecting society from health hazards. There are a large number of Acts, Rules and Regulations, Central and State, regarding public health and health care. Many laws affect health of people directly; and others indirectly.

Public Health Acts have been enacted at various times, based on needs of the time. Those relating to sanitation have been amended from time to time. The Municipal and Local Body Acts of 1920-21 cover urban areas. A model Public Health Act was proposed in 1987.

There are a number of laws, which aim at preventing pollution and protecting the environment – Water (Prevention and Control of Pollution) Act of 1974, Air (Prevention and Control of Pollution) Act of 1981 and Environment Protection Act of 1986. There are Rules – Biomedical Waste (Management and Handling) Rules of 1998, to ensure safe handling and disposal of waste, including hospital waste. The environment can be endangered by pollution of air, water and soil, unhygienic disposal of human excreta, insects and rodents, and use of pesticides and insecticides. Air pollution is a growing concern in many cities and towns, with increased traffic and industry, without adequate regulatory measures.

Food adulteration is rampant, affecting the nutrition and health of people. The Prevention of Food Adulteration Act has been amended three times – 1964, 1969 and 1976. The Drugs and Cosmetic Act, 1940 and the Rules there under, with amendments control the manufacture, import, storage, distribution and use of drugs. Blood banking is also regulated. The Drug Price Control Order exercises some control over a limited number of drugs. Legal measures banning smoking in public places and anti-tobacco Acts are being designed to protect people from injurious and addictive agents in tobacco.

There are Acts which aim to protect the health of persons working in factories and industries, such as the Indian Factories Act, 1947, the Dock Labourers Act, 1948, the Mines Act, 1952 and the Employees State Insurance Act, 1948, amended in 1975 and 1984. A number of Acts aim at the protection of mothers and children. There are laws which regulate the providers of health care: Medical Council of India Act, 1956, Indian Medicine Central Council Act, 1970, Homoeopathy Central Council Act, 1973, Dentists Act, 1948, Nursing Council Act, 1947, Pharmacy Council Act, 1948, Mental Health Act, 1987 and the various Clinical establishments / nursing homes Acts. The

Orissa Clinical Establishment Act is referred to elsewhere. Consumers are protected through the Consumer Protection Act and prohibition of cross practice. Other Acts include the Medical Termination of Pregnancy Act, 1971, the Prenatal Diagnostic Techniques (Regulation and Prevention Misuse) Act, 1994 (currently under amendment) and the Transplantation of Human Organs Act, 1994.

B. Situation Analysis

Orissa has problems similar to the rest of India. While there are many laws, their implementation is poor. Database and monitoring systems are weak. Implementing agencies are fragmented, poorly funded and staffed. The consumer movement and public demand is yet to become strong and effective. To protect public health it is necessary to ensure implementation of Acts and to formulate new Acts and Regulations where necessary.

C. Objectives

1. To protect the community from health hazards by minimizing environmental pollution affecting water, air and soil.
2. To protect the community from food adulteration, hazardous waste including biomedical waste, harmful pesticides and insecticides and toxic substances in the environment.
3. To promote consumer awareness and action for consumer protection.

D. Strategies

1. Formulation of a Comprehensive Public Health Act, based on the Model Public Health Act, 1987, with suitable changes.

This would include the notifiable infectious diseases and their surveillance. The Orissa Chemical Establishment Act will be implemented.

- i) A committee will be set up to formulate a Comprehensive State Public Health Act within a given time frame. The necessary legislation and rules will be drafted and adopted to implement the Act.
- ii) A committee will be formed to examine the State Clinical Establishment Act, its efficacy, lacunae, etc and make recommendations for improved implementation.

2. Implementation and monitoring of all Acts and Rules concerning health

- i) The Department of Health will co-ordinate the implementation of all laws, rules and regulations affecting health. A nodal unit in the Directorate will be responsible for oversight of public health regulations. Particular emphasis will be given to enforcement of Regulation of harmful pesticides and insecticides; Prevention of Food Adulteration Act; the Drugs and Cosmetics Act; and Biomedical Waste (Management and Handling) Rules, 1998, in all public and private sector health care institutions in the State.
- ii) Inter-sectoral collaboration and co-ordination will be augmented to improve implementation of laws affecting public health. Authorities will be set up as required by the law - e.g. State Mental Health Authority; State and district authorities for the PNDDT Act. NGOs will be involved in these official bodies.
- iii) Measures will be undertaken to maintain standards for quality of water, air and soil. The Health Department will develop and disseminate widely standards for the safety and quality of water, air and soil, and assist the pollution control board in ensuring that safety limits are not exceeded. Mechanisms for collection, transport and examination of samples of water, soil and air will be established through the public health surveillance system, with timely reporting. Existing laboratories at state and district level will be developed and upgraded
- iv) Studies will be undertaken regarding the adverse effects, if any, of pesticides / insecticides, working with universities, laboratories and peoples movements. Appropriate action will be taken.
- v) Improve awareness of food adulteration and contamination of food among the public and enforce the Act, Rules and Regulations. Provide necessary trained staff e.g. public analyst at state and zonal level and undertake continuing education. PHC medical officers or other staff may be notified as food inspectors where necessary.
- vi) Set up a Waste Management Cell at state and district level covering solid waste management and health care waste management. Establish a few model waste management systems, learning from other states. Ensure segregation at source and appropriate disposal in all public health institutions, and promote such segregation and disposal in private health institutions. Sensitize health care providers and training of health workers in handling, segregation and disposal of hospital waste. Provision of landfills, pits, safe incinerators etc. Work through local bodies such as city and town municipalities and panchayats, and with medical institutions.
- vii) Ensure medicinal drug quality through regular testing and taking appropriate action against producers of substandard drugs.
- viii) Play a pro-active role in matters relating to occupational health. Inspect factory premises, mines, agricultural and unorganized work sites to prevent occupational and environmental

health hazards and suggest appropriate measures to improve the health of the workers and people in the neighbourhood.

3. Improve public awareness through Information, Education and Communication activities regarding health effects of food adulteration, pollution and waste management

- i) Facilitate and encourage the functioning of consumer groups, voluntary organizations and the community to play an active role as consumers and citizens.

CHAPTER SIX (COMPONENT II)

HEALTH HUMANPOWER DEVELOPMENT

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CHAPTER 6.1

HEALTH HUMAN RESOURCE DEVELOPMENT

A. Introduction

GoO in partnership with DFID in a strategic review of the Orissa health sector in 1996 observed that *"in-service training of personnel"*, one of the components of health project inputs of the previous ten years, *"did not bridge the skill-gaps of the service providers"*.

Subsequently GoO initiated a multi-pronged health care reform initiative in which improved health human resource development was a major constituent. The following reforms to strengthen, and improve capacity of health personnel were introduced.

- Changed Internship training programme for better community health orientation.
- Short-term training for general doctors in anesthesiology in CHCs.
- Multi-skilling of pharmacists as lab technicians for TB and malaria programmes.
- Mandatory pre PG service in remote districts helped fill vacancies, and provided a rural orientation.

Since 1999 this process has been taken forward by the current Orissa Health Sector Strategy Initiative.

B. Situation Analysis

The work force in the public provided health services number about 30,000 in 30 different categories. More than 84% of the health budget is directed towards maintaining the workforce. The health department is therefore very labour-intensive, largely because of the one to one nature of health service provision.

The cadre structure of the department has significant influence on the performance of employees. The Organizational Review, concluded recently, recommended a further in-depth analysis of the current cadre system that leads to stagnation and very little opportunity for vertical mobility- a major reason for low motivation and commitment.

Educational and major health institutions are mostly clustered around and in three cities – Cuttack, Berhampur and Burla. In the absence of focused health

human resource development strategy and state policy norms, there are shortfalls and regional distributional disparities.

The behaviour, skill, attitude and commitment of the service providers, constitute the most critical variable in finally shaping perception about the quality of the service product and consequent satisfaction among clients.

Manpower productivity pervades all other performance indicators in the health sector. It is therefore imperative that a well-designed human resource development strategy, incorporating human resource planning and management, takes the centre stage of any comprehensive health reform plan.

**Table 1 Staff of Health and Family Welfare Department
Including Medical Education**

Category	No
Doctors in Health Services	4107
Doctors in Medical Education	812
Nurses	2308
Female Health Workers	7121
Male Health Workers	4480
Male Supervisors	1019
Female Supervisors	1046
Other category of service staff	5976
Sub-Total	26869
Administrative Staff	4550
Grand Total	31419

Important human power ratios in the state are shown in Table 2.

Table 2 Health human power ratios

Indicator	Ratios Currently
Doctor – population ratio	1:6444
Doctor-Nurse ratio	1:0.469
Nurse – Bed ratio	1:5.97
Female worker population ratio	1:4452

Problems of Health Human Power Development

An overview of the situation in the state led to the identification of the following specific problems focused on HRD in Orissa state.

Planning issues

- Absence of appropriate body responsible for human resource planning and development
- Lack of accurate data on man power
- Weak capacity for strategic management of human resources
- Lack of clear policies
- Over-centralized system of personnel administration

- Non-transparency in implementation of rules and regulations in personnel administration.

Deployment Issues

- Mal distribution of staff
- Urban concentration of medical professionals

Service related issues

- Lack of clarity of roles of individual workers
- Improper supervision and communication
- Inadequate facilities and support system
- Relatively inadequate compliance practices
- Behavioural and motivational problems
- Lack of concern for human factors in work environment.

Capacity Issues

- Inadequate preparation to cope with the diverse nature of clientele.

The Health Vision for 2010 envisages a health human power policy and human resource development strategy that would develop and nurture a health care service delivery team that would be adequately motivated, quality conscious, ethical, competent and socially oriented.

C. Objectives

The current focus on HRD in health emanates from the realization that in order to reap positive outcomes in terms of quality of output, compliance and commitment, the department needs to create an environment where there is clarity of job responsibility, sustained effort for human capacity building and human potential enrichment, and a deep concern for workers. This involves systematic planning of personnel requirements, placements, career development and career advancement programmes, action towards maintaining high morale and motivation, efforts at continuing education and an imaginative development programme that stresses quality, competence, transparency and accountability. In other words, the strategies are directed at creating a band of committed and skilled providers, keeping their morale and motivation high all the time, and moulding doctors to make them efficient health managers.

More specifically the objectives include:

1. To create good quality medical and paramedical professionals in the state, who would also be skilled in communications, behavioural sciences, welfare economics, equity considerations, information technology, health management, and rural services.
2. To maintain and update skill and knowledge levels of medical and paramedical professionals on a sustained basis, maximizing their job

satisfaction and improving the work environment for optimum performance.

D. Strategies

1. Create appropriate human resource infrastructure for enhancing capacity for human resource planning and development

- i) Establish a clearly defined HRD unit within the department, responsible for human resource planning and development.
- ii) Develop a central and district level system to create and continuously update a human resource database that provides decision support information in all matters connected with personnel.
- iii) Integrate human resource maintenance and routine welfare functions with the HRD unit.
- iv) Establish enabling linkages of this unit with all training institutions, particularly with medical colleges to continuously redefine and refine manpower and capacity forecast, design appropriate training programmes for the appropriate number of potential providers and provide feedback to top management for effective placement and monitoring.
- v) Establish norms for number and skill mix based on service protocols and service quality that will serve as a basis for recruitment, distribution and transfer of staff.
- vi) Establish a suitable manpower forecasting system for all cadres of staff, and link it with training institutions, particularly for clinical and administrative specialties of medical professionals.

2. Build human resource management capacity within the department including job and service protocols and promote a team approach keeping the end beneficiary (the community and client) in mind

- i) Define / redefine job responsibilities of each cadre of staff and prepare health providers to plan their work accordingly.
- ii) Distribute the workforce to enable optimum utilization, but with a pro-rural and pro-poor bias. Staffing of disadvantaged districts and tehsils will be given priority.
- iii) Address the problem of shortage of medical and para-medical professionals on a priority basis, taking innovative and proactive steps. Identify the factors constraining the staff availability at remote locations, and take practical corrective steps.

- iv) Identify and implement mechanisms to ensure that field level workers belong to the same locality. This would increase people's acceptance to the services offered.
- v) Develop specific operational policies and plans in all areas of human activity in the organization, covering issues like decentralized district based manpower management, transfers, placement, promotion, selection for training, salaries, incentives, rewards, career planning and behavioural correction.
- vi) Introduce cadre separation in health management and clinical services.
- vii) Revamp the supervisory functions and styles in tune with the HRD objectives, with a special thrust on feedback, counseling and target setting in jobs.
- viii) Ensure continuity and stability of leadership, as far as possible.
- ix) Establish a Performance Recognition System, clearly defining the norms for recognition.
- x) Link incentives to actual workload, performance and output, with due consideration for location and work situation.
- xi) Keep the core function, that is, provision of quality services to the people as the main concern, and build all personnel functions, human development plans and management actions around that.

3. Adopt appropriate HRD tools to assess and maintain staff capability and motivation on an ongoing basis

- i) The HRD unit will carry out systematic investigations such as job satisfaction surveys, quality of work-life surveys and consumer surveys from time to time, in addition to those directed at skill gap assessment. It will feed the findings into designing suitable HRD instruments.
- ii) Conduct short term HRD training for health managers on a continuing basis.
- iii) Performance appraisal, performance review discussions, potential appraisals, team building exercises, organizational development schemes and other relevant processes as applicable will be put in place by the HRD unit.
- iv) Establish an effective communication channel through newsletters and other mechanisms to keep all the staff abreast of the new developments, policy directions and outstanding performance stories.
- v) Address the change management process in a systematic manner with enough consultations downwards, especially in the context of implementing the new health policy and strategy.

4. Build suitable training and continuing education programmes for all health providers in the state. This will be linked and integrated with the training components of other strategies.

- i) Assess the skill gaps among staff cadres (human, conceptual, technical and managerial) vis-a-vis the service targets and design integrated and non-overlapping training plans to fill these gaps.
- ii) Integrate new skill development activities in the pre-service training programmes, particularly in medical education for future doctors.
- iii) Undertake behavioral training and communication skill development programmes on a regular basis to all categories of staff by enlisting and equipping existing training centres, or through a district training team approach.

CHAPTER 6.2

MEDICAL EDUCATION

A. Introduction

Greater attention will be paid to improving the facilities and quality of medical education. Closer linkages need to be established between the medical colleges and the health services for mutual growth and benefit. Guidelines of the Medical Council of India (MCI) will be implemented.

B. Situation Analysis

The three medical colleges in the state at Cuttack, Berhampur and Burla have a total intake of 321 undergraduate and 246 postgraduate students per year.

Institution	Under-graduate (MBBS)	Post graduate (MD,MS etc)	Higher speciality (Mch,DM)
SCB Medical College, Cuttack	107	110	4
MKCG Medical College Berhampur	107	65	-
VSS Medical College, Burla	107	67	-
Total	321	242	4

The associated teaching hospitals function as referral centres, providing tertiary level health care for training students and supporting the primary and secondary levels of the health system.

Over the last few years the quality of medical education in the state has declined. There is widespread dissatisfaction with the quality of patient care expressed by patients, community leaders, senior bureaucrats, political leaders and even by professional staff themselves.

The contributory factors include frequent absenteeism among senior teaching and consultant staff for reasons including private practice; poor working environment; lack of adequate support services such as laboratory investigations, x-ray and imaging facilities. In addition lack of opportunities for professional staff to remain up to date through attending workshops, conferences and seminars, contribute to the problem.

In spite of serious public health problems and potential areas for original research, the research output is minimal. This is partly due to lack of a research ethos, inadequate research training supervision, and poor status of patient records and documentation, lack of equipment and research facilities and lack of recognition of research work for promotion.

C. Objectives

1. To ensure that medical education is germane to the public health needs of the state.
2. To produce an adequate number of medical and paramedical professionals to meet the needs of the State.
3. To create competent and relevant medical and paramedical professionals of good quality, with additional skills in communication, behavioural sciences information technology and health management techniques and knowledge of welfare economics and equity considerations.
4. To maintain and update periodically the knowledge and skills of medical and paramedical professionals.
5. To upgrade and improve the departments of Preventive and Social Medicine / Community Health and ensure their active participation in the public health system, especially in policy making, planning, implementation, monitoring and evaluation, field based research and public health management.
6. To achieve greater integration of medical colleges and associate teaching hospitals in the public health system of the state, especially in the implementation of national programmes.

D. Strategies

These strategies are in keeping with the guidelines of the Medical Council of India (1997 and subsequent notifications). Several have been adopted by other universities and colleges in India and found useful.

1. Comprehensive faculty development programmes

- i) Assessment of faculty requirements will be done, taking into account teaching, research and patient care responsibilities.
- ii) Teacher training will be made mandatory for all teaching staff.
- iii) Regular updating of knowledge of faculty will be ensured by visits to centres of excellence, attending conferences and workshops. Sabbatical facility for senior faculty and exchange programmes and regular evaluation by peers and students will be introduced.
- iv) Rotation of headship of departments, based on academic criteria will be considered.
- v) Promoting methods of self-study and self-directed learning.
- vi) Upgrading and improvement of libraries with provision of up to date textbooks, monographs and journals, and internet and e-mail facilities to access online resources, National Medical Library, etc.
- vii) A medical education cell will be set up in each medical college to facilitate operationalization of changes in medical education, including conducting teachers training workshops.

- viii) Medical colleges in the state will establish enabling linkages with advanced medical centres or medical institutes elsewhere in the country for faculty skill-upgradation on a continuing basis.

2. Improved standards of teaching, through adoption of better teaching methods

- i) Faculty will be trained in modern pedagogic methods with support from the National Teacher Training Centres and WHO.
- ii) Increased use of audio-visual aids like video, slides, OHP and lecture notes.
- iii) Problem-based learning, small group and other newer techniques – use of case studies, simulation games and exercises.
- iv) Increase in number of tutorials and seminars, decrease in didactic lectures.
- v) Regular assessment of teaching quality, with student feedback.

3. Community- based educational methods

In order to meet the state's health needs in an effective manner, community-based medical education will get topmost priority, and these will be introduced from the beginning of the professional course to orient them to the specific health needs of Orissa.

- i) Community based education will be strengthened with part of the teaching to be done at district hospitals, CHCs and PHCs. Clinical teachers will have short teaching postings at these centres.
- ii) Teaching will be community oriented with emphasis on health promotion, growth and development, nutrition, health promotion, school health services and environmental health.

4. Curriculum revision and introduction of new topics into the curriculum

- i) Additional topics will be introduced into the curriculum, without detriment to the time needed to teach basic subjects. Newer topics include medical ethics, behavioural sciences, health economics, history of medicine including other systems of medicine (homeopathy, ayurveda, unani, sidda), orientation to local health traditions, alternative methods of healing, Health management, health informatics.

- ii) MBBS training (particularly internship) will be strengthened so that good basic doctors are trained. Feedback and review systems will be developed.

5. Comprehensive continuing medical education (CME)

- i) CME departments will be established in all medical colleges, which will link their work with other agencies involved in CME and re-certification (e.g., Indian Medical Association, other professional associations).
- ii) CME programme will be drawn up for government health professionals and private practitioners.

6. Further improvement of clinical care in teaching hospitals

- i) Development and use of standard protocols for patient management
- ii) Improvement of nursing care
- iii) Upgrading and improvement of clinical pathology, biochemistry, radiology and imaging services with introduction of quality control.
- iv) Upgrading of medical records departments of teaching hospitals with computerization where feasible; rapid retrieval mechanism of old records, and integration of OPD and IP records, and investigation results.
- v) Regular assessment of quality of patient care will be undertaken through prescription audits; medical record (chart) audits and death (mortality) review.
- vi) Exchange visits of faculty (including nursing faculty) with centres of excellence.
- vii) Regular links with other government hospitals (such as district and sub-divisional hospitals) to improve standard of care and to improve of referral and back referral mechanisms.

7. Improved quality of research

- i) Research committees (including ethics sub-committee) will be formed in each medical college for identification of research priorities; and assessment and screening of research output of various departments for quality and quantity.
- ii) Liaison will be established with other agencies and central bodies such as the Indian Council of Medical Research, and Regional Research Centres. An assessment of ethical issues in research will be followed by training and setting up of research ethics committees.
- iii) Upgradation and improvement of medical records departments (mentioned above).

- iv) Encouragement and facilitation of research by students (undergraduate and postgraduate) with well formulated thesis guidelines, mentoring and supervision; institution of sponsorship and awards; linkage of research output and student supervision with promotion.

8. Strengthening facilities for medical education and increasing the intake of students

- i) Assess present and future infrastructure requirements and mobilize donor support for infrastructure development and maintenance
- ii) Analyse the medical manpower availability, demand and shortage, and make a need-based forecast for future
- iii) Encourage the setting up of new medical and dental colleges in the State in the private as well as the public sector
- iv) Adopt measures for increasing the intake of medical and other para-professional students in the state by increasing seats in existing institutions.
- v) Post-graduate intake to be guided and determined according to available infrastructure and requirements of state's public health system.
- vi) Establishment of a Medical University to improve academic standards and to promote uniformity in health science education will be considered.

CHAPTER 6.3

NURSING EDUCATION

A. Introduction

Nursing personnel play an important role in the health care delivery system. Shortages of nurses, lack of in-service training programmes and inappropriate norms are adversely affecting the quality of care in hospitals as well as in the community.

B. Situation Analysis

At present the formation of good quality nurses is fraught with difficulties due to poor infrastructure, inadequate facilities for learning and lack of qualified teachers. These issues have been highlighted by the Central Council of Health and Family Welfare, New Delhi, in 1995.

Table 1. Institutions for Nursing Education in Orissa

Sl. No.	Institution	Course offered with Duration	Annual intake	Existing Teaching Faculty	Requirement as per INC
1.	College of Nursing, Berhampur	1 – Basic B.Sc. Nursing (presently no intake).	20	Principal – post vacant	1
		2. Post Basic B.Sc. Nursing	20	V. Principal No post Lecturer - 3 Cl. Instructor -2 PHN -1 Professor - Nil Asso. Prof. - Nil	1 9 17 7 7
2.	School of Nursing -3 in Cuttack, Berhampur, Burla	Three years Diploma in General Nursing & Midwifery	1- 100 2 - 50 3 --50	Principal Tutor - 1 V. Principal- nil Sister Tutor PHN Tutor	
3.	Lady Health Visitor Training School, Berhampur	6 months promotional course for ANMs to become Health Supervisor (F)	60	Superintendent - 1 Sister / Tutor / PHN Tutor - 6	

The quality of training in all nursing institutions has deteriorated in recent years. There is an acute shortage of teachers in all Schools of Nursing and the College of Nursing. Lack of equipment / instruments and teaching aides for practical demonstration and training in hospitals impairs practical training.

With inadequate numbers of clinical instructors in teaching institutions, students are left to learn on their own in clinical settings. Ward nurses and

their seniors do not possess the required higher training in nursing and are unable to guide students.

Insufficient hostel accommodation, classrooms and practical demonstration rooms in all Schools of Nursing and ANM training centres, results in overcrowding. Lack of proper annex buildings in the community negatively affects the learning experience of students. Lack of vehicles and fuel provision also poses a problem in all institutions.

Lack of exposure to any type of in-service training for teachers over a long time has resulted in inefficient and outdated teaching. The Indian Nursing Council (INC) is pressing institutions to improve existing lacunae and comply, failing which INC recognition shall not be accorded.

The freeze on recruitment of nurses since 1995, has resulted in critical shortages. Contractual appointment of nurses is also not in practice.

C. Objectives

1. To prepare high quality nurses, competent to provide comprehensive nursing care in varied settings and specialized nursing where required.
2. To update teaching skills; continuing education; and improve teaching facilities and infrastructure for nursing education.
3. To strengthen postgraduate nursing; upgrade all nursing Schools to collegiate programmes in a phased manner as per Indian Nursing Council guidelines; and improve the standard of nurses working in medical college hospitals.
4. Develop and integrate a management information system in nursing with the health management information system.

D. Strategies

1. Strengthening infrastructure for basic nursing education

- i) The Department will strengthen infrastructure, building, equipment, teaching aids, other teaching materials and library (with Internet facilities) in all nursing training institutions.
- ii) Teaching posts will be filled as per INC guidelines with posting of senior graduate tutors / PHN as clinical instructors.
- iii) Clinical nursing teaching units will be set up in major departments of medical college hospitals (medicine / surgery / maternity and paediatrics) with essential requirements for teaching patient care.
- iv) Posts of two wardens in each school of nursing will be created.
- v) Four nurses will be deputed for post graduation annually to meet immediate requirements, and a M.Sc. Nursing program will be started in the Colleges of Nursing. Faculty required will be

brought on deputation until the state has the minimum faculty required.

- vi) Selected students will be sponsored for specialized training within and out side the state and for educational visits.

2. Strengthening nursing services in hospitals

- i) Essential items for patient care will be supplied in all wards and , central sterilization and supply departments (CSSD) will be established.
- ii) Provision for joint ward teaching by tutors and ward nurses will be strengthened. Use of case studies, seminars relevant reading materials and books, essential records with a report maintenance system will be introduced in a short time frame.
- iii) A student performance assessment system and regular nursing audits will be ensured.

3. Strengthening community field practice areas

- i) Repair and renovation of the existing annex buildings. Essential provisions will be provided to make them safe and habitable.
- ii) Mobility will be ensured (vehicles and fuel).
- iii) Teaching aides, small libraries and other materials required for innovative teaching of community nursing will be made available.
- iv) Proper supervision and performance assessment systems will be instituted.

4. Strengthening continuing education

- i) In-service continuing education for nurses with courses will be set-up, on ward management and nursing administration. This will overcome the current constraint where nurses above staff nurse level are promoted without additional qualifications.
- ii) To integrate in-service training offered by different programmes and agencies (UNICEF, WHO, others) a continuing education unit will be established in the Directorate develop systematic, integrated training modules. With three regional branches in Regional Training Center (H & FW), Cuttack; F.W. Training Centre, Ainthapali, Sambalpur; and College of Nursing, Berhampur
- iii) A one year course nursing administration and in ward management will be established at the School of Nursing, Cuttack.

- iv) The around 200 faculty in nursing training institutions, will be given updates in nursing and teaching methodology on a periodic basis.
- v) In-service training will be conducted for the following categories of nurses working in the hospital and community:
 - a) Staff nurses in medical college hospitals / rural hospitals with specialized courses for special unit nurses.
 - b) District Public Health Nurse (DPHN).
 - c) Public Health Nurse (PHN).
 - d) Lady Health Visitor (LHV) / Health Supervisor (F).
 - e) ANM / Junior Health Worker (Female)
- vi) Nurses working in special units other specialized institutions in the country.

CHAPTER 6.4

ALLIED HEALTH PROFESSIONAL AND HEALTH WORKER TRAINING

A. Introduction

Health teams are responsible for the running of medical and public health care services through primary, secondary and tertiary levels of health institutions. Varying types of knowledge and skills are required for different health personnel. In the past there has been excessive attention paid to the training of doctors and to a lesser extent of nurses. In the coming phase greater attention will be paid to the training and continuing education of allied health professionals and health workers. They will include dentists (this will be added to medical education), pharmacists, physiotherapists, x-ray technicians, counselors, social workers, optometrists, audiometrists, speech and hearing therapists, dieticians health educationists, dental hygienists, senior and junior health assistants – males (females being covered under nursing); medical record technicians, health engineers and others.

B. Situation Analysis

Though health workers form the backbone of the health services, their training needs have been largely neglected. The basic training is outdated, being linked to specific programmes, and continuing education is inadequate. Priority attention needs to be directed to human resource development of this group.

C. Objectives

1. To update the knowledge base and skills of health workers and allied health professionals by better and more continuous training.
2. To improve institutional capacity and increase partnerships for the above.

D. Strategies

1. Needs assessment and resource inventory

- i) A health manpower mapping exercise in the state will be done, covering the public, voluntary and private sector, regarding availability of all categories of health personnel.
- ii) A directory and mapping of training institutions in the state, with an assessment of their training capacity and quality will be developed. An analysis of the annual intake and production of health training and educational institutions will be done to estimate current capacity in the

context of requirements as per accepted norms. This will form the base for planning.

- iii) Training needs assessment will be done.

2. Voluntary and private sector partnership

- i) The voluntary and private sector will be encouraged to set up training institutions for categories that have been identified as priority. Quality of training will be regulated through an accreditation and quality assurance system.

3. Strengthening training for skill upgradation and multi-skilling

- i) Upgradation of government training institutions will be done undertaking after an overall costing exercise and a facility review. Duplication will be avoided and sharing of facilities encouraged. Practical and field training in these institutions will be particularly strengthened. The wealth of training material developed by different agencies and the NGO sector will be utilized.
- ii) The basic training curriculum, especially for health workers will be within the framework of primary health care, and will focus on skill development, in relation to job responsibilities. Communication and interpersonal skills and methods for community participation will be emphasized.
- iii) The examination system will be standardized for both public and private institutions. Faculty development will be promoted and supported. Training reviews, and a range of studies will be encouraged so that curriculum development and changes in teaching methodology will occur in response to need.
- iv) A comprehensive continuing education programme will be developed, integrating elements from the different national health programmes.
- v) An educational body will oversee training and continuation education programmes, and will develop student / participant feedback and review systems.
- vi) The training institutions will be strengthened, building on existing infrastructure already developed. They will be organizationally linked with the District Training Centres and State Institute of Health and Family Welfare.
- vii) A more detailed plan will be developed in 4 – 6 months time. Sources of financial support will be sought from central and state government, universities and councils, private agencies and donors. Part payment of fees may also be considered.

CHAPTER 7 (COMPONENT III)

ORGANIZATIONAL DEVELOPMENT AND SYSTEMS MANAGEMENT

CHAPTER 7.1

ORGANIZATIONAL CHANGES

A. Introduction

Successful implementation of the strategy depends on the appropriateness of the internal organization, which to a large extent is reflected in its structure. Structure represents the network of relationships within an organization over a fairly long period of time. It is not only the supra-structure, but also other aspects in the organization such as the organizational climate and culture, systems and the people who implement the strategy, that are equally important. It is therefore imperative to look at the organization that implements the strategy, and take suitable corrective steps to ensure that the building blocks in the organization can adequately take care of the critical tasks implied in the strategic implementation.

Realizing this, a functional review (Organizational Review) of the department was carried out during July -September 2002. The key findings of that review endorsed the need for strategic choices to improve the effectiveness of the organization in strategic implementation. A summary of findings is given in the following paragraphs.

B. Situation Analysis

These are the findings of the Functional Review 2002, some of which may require further in-depth evaluation to formulate alternative plans for correction:

Structure:

- The current structure is less than facilitatory - not sufficient focus on key aspects like human resource management, planning, quality assurance, monitoring and supervision, and health financing
- Structure is highly hierarchical. Focus is on infrastructure rather than service delivery.
- Norms of posts are institution-based, and not on load - leading to illogical allocation of human resources.
- There is scope for internal re-organization of the department around key streams -public health, monitoring, surveillance etc

Staffing

- There are shortages in critical positions –like doctors, and some excesses in other areas. Shortage of doctors will be severe in future.
- Function performed by each cadre and workloads should be measured to attempt rightsizing of the department.
- There is scope for simplifying cadre system. The current structure does not support some key functions, sometimes leading to conflicts and under-performance (such as, doctors being placed in important administrative functions)
- Transfers and postings are subject to political interference. The shift to district cadres has helped in improving the situation. Recruiting for specific posts and locations should be encouraged.

Systems

- There is scope for improvement in monitoring systems at all levels - especially computerization.
- There is widespread apathy, lack of sensitivity to patient needs. Systems for accountability are lacking.

Outsourcing

- The department's efforts are commendable. Scope exists for further action to outsource more non-core activities

Other Factors Affecting Performance

- Functioning is hierarchical and systems top-down. Decentralization practice is limited, and where available, used little.
- Consultative and participative processes minimal. Goal-setting and evidence-based planning are absent, particularly at the district level.
- Communication is slow and bureaucratic. Process delay in decision-making is common.
- Sharing of information, and learning among districts are poor.
- Team spirit and collective responsibility are obviously poor in functional units. Working is fairly compartmentalized.
- Most managers are from technical background, with little or no induction to administration or management
- In-service capacity building needs to be systematized, and need-based training introduced.
- Political interference and influence in recruitment, transfer, promotion and posting affect morale and efficiency.
- Rules, regulations and operational details of units are not available in documented form. Job charts and responsibilities of positions are not clearly spelt out except in some centrally sponsored schemes
- Managers at different levels are not willing to use disciplinary measures for pulling-up non-performers and defaulters.

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C. Objective

The objective is to gear up the Health and Family Welfare Department to implement the wide range of strategic functions most effectively.

D. Strategies

1. Structural changes for better strategic and operational management

- i) Restructure the department around logical groupings based on functions and roles, such as HRD, planning, financing and budgeting, monitoring and evaluation, quality control, general administration, specialist care and public health.
- ii) Establish norms and manpower ratios based on workload, and review them periodically.
- iii) Convert most cadres into district. Recruitment for specific positions and locations will be encouraged, allowing movement outside cadre based on competitive merits.
- iv) Introduce a system of incentives and disincentives at every level to encourage performers.
- v) The present top-down hierarchical and instructive systems will be suitably changed to make them more innovative, functional and result-oriented.
- vi) New models of primary health care, based on local needs and circumstances, will be tried out.

2. Staffing changes to improve efficiency of operations

- i) Shortage of doctors and other service providers will be tackled on a priority basis through a variety of steps, both innovative and traditional, to meet the short and long-term requirements. This would include encouraging local bodies to recruit doctors at the pay scale and conditions fixed at the respective levels, and inviting private partners to the field of medical education.
- ii) Functions performed by each cadre will be subjected to in-depth review to right size and simplify the cadres.
- iii) Administrative matters and measures to increase the morale and motivation are taken care of in the strategies contained in section 'Administrative Reform'.

3. Improvements in the culture, processes and systems to make the organization efficient, up-to-date and responsive to the needs of the people

- i) A computerized comprehensive performance indicator system addressing key outcomes, processes and impact will be developed. Indicator based

grading system of infrastructure at the district level will be used to measure efficiency, effectiveness and user-friendliness.

- ii) Planning process at the district level will be made more consultative and participative. Vision, plan and target setting for each district, and different functional units will be encouraged.
- iii) Maximum use of decentralized authority by the district and institutional leadership will be facilitated. Doctors holding management posts will be clear about their roles, and capable of discharging them adequately. The current practice of a general unwillingness to adopt disciplinary measures will be changed.
- iv) Communication channels and processes within the department will be modernized using new technologies to make them speedy and effective for quick decision-making.
- v) Information sharing across the districts will be encouraged.
- vi) Independent user satisfaction audit will be conducted periodically.
- vii) Out-sourcing of identified non-core functions will be encouraged.
- viii) Productivity enhancement measures will be adopted through implementation of HRD strategies.

CHAPTER 7.2

ADMINISTRATIVE REFORM - HEALTH PERSONNEL

A. Introduction

The health system is being strengthened to provide comprehensive health care with quality, equity, efficiency, and accessibility, at reasonable cost to all people. Services will focus on primary health care and public health with emphasis on rural area, urban slums, the poor, women, children and the elderly. Secondary care facilities will be supportive of primary health care. A referral system to and from the primary, a secondary and tertiary care level is essential. Inter-sectoral co-ordination will increase, as many health determinants are outside the purview of the narrowly defined "health services". The functioning of this complex organization is largely dependant on the quality and motivation of service providers and the system in which they serve.

The current structure of health services (dealt with in the earlier section) and the administrative mechanisms had evolved to meet the demands of earlier times. Reforms will be undertaken to meet the present and future needs and demands.

B. Situation Analysis

Primary and secondary health care is managed by personnel of the State Medical and Health Services. Tertiary care is provided by the teaching and other staff of medical colleges and attached hospitals.

Demotivating factors in the present system include:

- Skilled health professionals are asked to work in areas where their expertise and skills cannot be exercised.
- Motivated health personnel are not recognized or rewarded and no action taken for poor performers to improve.
- Some health personnel work in remote areas without minimum living facilities for long periods.
- Restricted promotional avenues and late promotions lead to short tenures and frequent change in higher posts.
- Inadequate capacity and skill building of staff in hospital and health management.

C. Objectives

To develop and nurture competent, well managed, motivated and satisfied health personnel in the workforce to enable them to provide good quality health care to people.

D. Strategies

1. Ensure a fair and transparent policy for recruitment, postings, transfers and promotion, and reduce frequent turnover

- i) Conduct a needs assessment, of types of health personnel required for primary health care, public health medical care and administration at all levels.
- ii) Recruitment of various categories of health personnel will be according to needs of the state. Health staff will be protected from the general staff reductions taking place due to budgetary constraints and wider administrative reforms. However unnecessary, unproductive staffing will be avoided, and performance will be a strict criteria for continuance.
- iii) Placement of health personnel will be according to qualifications, training and skills in relation to needs. Mismatch will be minimized or eliminated to avoid wastage and frustration.
- iv) Time-bound initial posting of health personnel in identified remote, difficult to access places will be made for three years, followed by postings to better areas. Difficult areas will be identified using criteria such as hilly, jungle areas, not approachable by all weather motorable roads, non-availability of electricity, transport, communication, and market facilities.
- v) Incentives to serve in these areas may be monetary, preferential selection for postgraduate studies or others.
- vi) Stepwise posting of health personnel will start from sub-centres, PHC(N), block PHC, area hospital, sub-divisional hospital, district hospital and capital hospital. For health managers it will start from PHC(N) up to state headquarters in a stepladder fashion.
- vii) Health personnel of all cadres will need to work in primary health care institutions for at least 7 – 10 years.
- viii) Medical officers completing ten years of service in primary health care will get an option to work in public health or curative health. Posting of medical officers will avoid disturbing the common cadre of Medical and Health services (peripheral cadre).
- ix) Timely promotion of all categories of health personnel will be ensured.
- x) Transparent policies of transfer and timely promotion for all health personnel will be implemented impartially to improve work culture, motivation and satisfaction of staff. One or two time bound promotions will be introduced with selection based on merit cum seniority for higher positions.
- xi) While considering promotion of health personnel, at least one third of their service period by that time should be in the KBK and backward districts (Boudh, Gujapati, Kandhamal).
- xii) Periodic performance appraisal will be undertaken, with commendation to good personnel and warning notes to ill-motivated workers for their improvement.

- xiii) A fast-track promotion system based on merit and capacity will be studied for action enabling younger professionals to take up managerial positions and providing stability in leadership. There will be a strict selection process, offering officers an option and keeping 30% of promotional posts reserved at all levels of promotion.

2. Motivate health personnel and improve performance and satisfaction

- i) The Department will help motivate and nurture health personnel, through recognition, positive feed back, encouragement and close facilitatory, supportive supervision.
- ii) There will be training of administrative officers in management, administration, leadership, communication and inter-personal skills and teamwork

3. Develop skills to manage health institutions and programs efficiently and effectively

- i) The national and state health programmes will be integrated, changing the present vertical approach.
- ii) Periodic capacity building training of all health personnel will be undertaken.
- iii) Administration will be decentralized with specific responsibility and accountability at all levels.
- iv) The grievance redress system will be strengthened to function promptly.
- v) Training in medical and bio-ethics will be conducted for all medical officers in collaboration with medical colleges and the Indian Medical Association. Resource persons from other parts of India may be invited to help train a core group of trainers at state level.

CHAPTER 7.3

DECENTRALISED MANAGEMENT AND ADMINISTRATION OF HEALTH SERVICES

A. Introduction

Successive Five-Year Plan documents have emphasized the importance of decentralized planning and community development approach. Decentralization, in the current context has three dimensions, namely,

- (a) Decentralization at the political level, State legislature, local bodies (Zilla, Mandal / Tehsil / Block, Gram) with elected representatives having some administrative financial control.
- (b) Decentralization within the Department of Health, with devolution of powers to peripheral levels. District cadres of paramedical staff have already been established. Decentralization in specific areas (e.g. built assets, transport, equipment), training, personnel administration, project a programme supervision and monitoring, will be introduced after adequate planning and preparation.
- (c) Decentralization of powers and responsibilities to people, with involvement of society groups, voluntary organizations, people's organizations, mahila mandals, self-help groups, and others in various committees to participate in decision making, reviews etc.

Decentralization is part of democratization of the health system, moving away from the top down, hierarchical system to a more participatory system. The focus is on promoting people's participation in planning, implementation, and monitoring of programmes affecting their living conditions and quality of life. This requires capacity building and empowerment training. People's participation can prevent misuse and leakage of resources, contributing to more efficient utilization and ensuring availability, accessibility and quality of health services. Village health committees can develop health and development plans through micro-planning exercises. The role of health professionals and administrators does not get minimized, but they leave new partners.

Through systematic decentralization, departmental officials can discharge their functions more effectively, responding promptly to local needs, with accountability to people and elected representatives. A key issue is the relationship between the official health hierarchy and panchayat bodies. The department has a responsibility to associate itself with the functioning of panchayat bodies and the right to exercise technical supervision.

The advantages of involving the community through Panchayat Raj Institutions, supported by public health professionals and social scientists, are many, such as

meeting specific local needs; providing focus on vulnerable and disadvantaged groups; and greater emphasis on preventive measures affecting the whole community.

Orientation capacity building, and training of Panchayat members with regards to their duties, responsibilities, entitlements, and also in management procedures is necessary to achieve objectives of better services.

B. Situation analysis

The Constitutional Amendments, 73 and 74 (Panchayati Raj and Municipalities) provide opportunities and powers to improve health care services. District Health Societies (Zilla Swasthya Samitees) have been constituted in the State with the purpose of looking at all aspects of health. These are integrated, viable and sustainable alternatives to achieve goals of decentralization. They need strengthening, expansion and greater public participation. ZSS should be seen as transitional arrangements prior to transferring responsibilities to the PRIs. The relationship (professional / technical / administrative) between the Department of Health and the local bodies and people need to be established. Management decentralization needs to be established within the department. District and peripheral institutions need greater autonomy to plan, budget and implement. The role of civil society and the community with respect to health services has to be developed.

C. Objectives

1. To address the health needs of people with equity, quality and participation and be inclusive of their priorities in planning health care services.
2. To involve people (elected and others) in planning, implementation, monitoring and evaluation of health interventions.
3. To tap the enormous human potential and skills available in the community to improve programme implementation.
4. To ensure transparency and accountability, through social audits.
5. To empower people for health decision-making, including enabling them to mobilize additional resources locally and ensure efficient utilization.

D. Strategies

1. Appraisal of technical and organizational capacity of local institutions

- i) Study institutional arrangements, infrastructure, roles and responsibilities, structure and processes of the district and block level health institutions for supporting formulation and implementation of decentralized health plans, based on local needs.
- ii) Assess the know-how and expertise of local bodies including Panchayat Raj Institutions for successful planning and implementation of micro-level health development plans.

- iii) Study the existing role and capacity of the Panchayat Raj Institutions in providing links between the people and local health officials and also between people and Government at higher levels.
- iv) Examine the implications and impact of steps taken by the Govt. in empowering Panchayat Raj Institutions with required authority for carrying out the responsibility of preparing and implementing micro-level and multi-level health development plans.
- v) Streamline the roles and responsibility of peoples' representatives and non-officials vis-à-vis the health department in formulation, implementation, supervision and monitoring of micro and multi-level health plans, schemes, projects and programmes.
- vi) Study the process and mechanism, including areas of conflict, of integrating micro-plans at village, panchayat and block levels to higher tiers at district and State levels.

2. Building organizational and administrative capacity of PRIs

- i) Orientation courses will be held for PRI members regarding their powers, privileges and responsibilities, local resource generation and management.
- ii) Invite local and outside experts to build capacity of local institutions in identifying felt needs and local priorities; micro planning; clarifying their roles and responsibilities in implementation.
- iii) Build local data bases to enable PRIs in effective formulation of decentralized plans

3. Strengthening organizational capacity of Zilla Swasthya Samitee

- i) Improve organizational capacity of Zilla Swasthya Samitees, and ensure responsibility and accountability of the ZSS executive body members with regard to service delivery performance.
- ii) Training will be conducted to improve financial management skills; improve transparency in operation and financial reporting; provide key performance monitoring indicators, and participate in the Health Management Information System.
- iii) Augment user fee collection through expanding and diversifying its service range, improving quality of services and using effective IEC measures to promote public confidence. No one will be denied health services because of inability to pay. User fees will not be changed at primary health care level, but only at secondary and tertiary care level with exemption of the poor.
- iv) Managerial capacity will be improved for management and maintenance of institutional infrastructure and facilities.

4. Facilitating transfer of authority, management responsibility and resources to local bodies.

- i) The Health Department will prepare itself to act swiftly when devolution of powers and decentralization of responsibilities by the state legislature to the Panchayat becomes fully functional. It will study the experience from other states in this regard.
- ii) The department will facilitate the transfer of authority, function and responsibilities to the district and block level institutions with reference to management and maintenance of health facilities and assets. The process will start with the transfer of management authority in respect of more peripheral institutions like the SD PHCs and sub-centres, subsequently moving on to block level institutions (CHCs), sub-divisional hospitals and district hospitals.
- iii) The health management functions of the ZSS are limited to certain specific areas of health care and fund utilization. The strengthening of ZSS will make them more efficient in discharging those responsibilities. The ZSS will be expanded to include more members from the Zilla Parishad (ZP) as a first step towards transfer of authority and responsibility. This process will help sensitize ZP members to the complex health management issues early on, before formal transfer of authority takes place.
- iv) When formal transfer of authority to PRIs is established, ZSS will no longer have any direct management responsibility. However, the ZSS will continue, in a different role. It will then have advisory, monitoring and coordination functions, and will act as a link between the PRIs and the health authority at the state level. Changes that are contemplated within the department during such transfer are mentioned under strategy 6.

5. Enhancing financial autonomy of Panchayat Raj Institutions

- i) Broad principles will be developed governing the autonomy / legal rights of Panchayat Raj institutions regarding access to resources from different sources for health. Procedures will be established for funds utilization and management by PRIs.
- ii) Principles of financial discipline, internal monitoring and external auditing will be written up.
- iii) The resource base of Panchayat Raj Institutions will be expanded by adequate provision of budgetary supports and grants.

6. Implementing phased decentralization within the health department

- i) Phased devolution of powers will be scheduled within the department, after adequate preparation is made at each level (District / CHC / PHC / Sub-

- centre) that is responsible and accountable for taking prompt and appropriate action, with proper supervision by higher levels.
- ii) Training of Medical Officers and others to ensure proper (efficient and effective) use of the powers delegated to them.
 - iii) A strategy will be developed for a fruitful relationship between local bodies (Panchayats and Municipalities) and the health department, with respect to administrative, professional / technical, disciplinary and other decision makers.
 - iv) Local committees for health and development will be set up at sub-centre PHC level with representatives from the community and officials, to determine local needs, prioritize, plan and implement. Local representatives will be involved in the management of (district hospitals, block hospitals, and community health centres, through Advisory Boards, with enough powers to ensure better functioning.

CHAPTER 7.4

HEALTH CARE FINANCING AND FINANCIAL MANAGEMENT

A. Introduction

The importance of good health for the wellbeing and productivity of individual citizens and the community is well recognized. Public funded health services play a vital role in health care especially for marginalized sections of society. However, the present contribution of public funding to total health expenditure is small due to insufficient allocations. The major part of health expenditure is accounted for by out of pocket expenses with severe equity implications. Low expenditure by the public sector results in economically weaker sections of society being deprived of essential health services. The budget allocation will therefore be protected and increased. Given the current fiscal situation, alternate sources of finances to augment budget allocations will be sought.

Distribution of limited outlays between primary, secondary and tertiary care and public health has been considered. Increased budgetary allocations for public health and primary health care can bring about greater equity and better health gains. Regional disparities can also be reduced through allocations that are based on need.

Externally aided projects have injected a substantial amount of funds over a period of time. When assets are created and activities started through externally aided projects or public funds, it is necessary for the State to ensure sustainability through budget allocations, for maintenance of assets and continuation of activities. Orissa can ill afford to allow assets created at great expense to deteriorate.

Sometimes, allotted funds remain unutilized for a variety of reasons. This will be minimized. Timely fund release is critical, as also delegation of financial powers and utilization of those powers. Disclosure of financial transactions and statements to the public for scrutiny will help create transparency and accountability.

Management of finances requires good planning, budgeting accounting systems and control over expenditure. Norms and indicators for outputs and outcomes must be developed to enable government and others to measure the impact and efficiency of health spending. It is recognized that health goals set by the state and country cannot be attained without adequate financing of health services and a sound financial management system.

Realizing that one of the root causes of ill health is poverty, and ill-health leads to poverty, steps will be taken to ensure that the poor get the needed health care in time, without their becoming more poor and indebted.

B. Situation Analysis

The situation in Orissa is similar to the rest of India with low levels of public expenditure for health falling below accepted per capita norms. Public financing is a mix of tax financing and external funding from GOI and donors. Out of pocket (OoP) expenditures by individual households are high. The total health spending in Orissa for 1999 – 2000 was estimated at Rs. 1,307 crores, 3.2% of SDP (State Domestic Product) with Rs. 366 per capita per annum. For 1999 – 2000 estimated total OoP expenditure was Rs. 760 crores (National Sample Survey data) against government budgetary spending of Rs. 460 crores. Other departments spend an estimated Rs. 70 crores annually. In kind flows at a rough estimate were Rs. 12 crores, and extra - budgetary flows to district societies (Zilla Swasthya Samitee) from Government of India and donors were Rs. 23 crores. User charge of Rs. 2.1 crores was negligible, but important for the institutions concerned. Their cost effectiveness and impact on service utilization need study. In recent years approximately 84% of budget spending was on salaries. Non-salary expenditure is low. Expenditure on medicines is approximately only Rs. 4 per capita annually.

There is need in the long term to raise the allocation of funds at least to the extent suggested in the National Health Policy 2002. Allocation for health services will be considered an investment in human development and a way to actualize the right to health. Given the fiscal situation, extra budgetary sources and other measures will be considered. The Department of Health has in the past few years initiated policy measures such as cost saving through rational drug procurement etc, which ensure quality and equity. It has also initiated analytical work. This provides a good base for further developments.

C. Objectives

1. Raise overall financial resources for health needs on a sustainable basis, experimenting with innovative methods of health financing.
2. Protect and increase budget allocation and financial resources for health and family welfare as suggested in the National Health Policy, 2002.
3. Increase efficiency in fund utilization, avoiding wastage and duplication.
4. Improve distribution of health care expenditure to maximize impact and equity, with focus on primary health care and public health including priority diseases, and on reducing inter district and social disparities.

D. Strategies

Keeping health sector objectives and the current and predicted fiscal situation in mind, four major strategies will be adopted.

1. Improved systems and processes for strengthened financial planning management and utilization of resources.

- i) Short and medium term planning will be done through a financial planning and budgeting cell to ensure need-based allocation and utilization. This cell will have the required expertise in health financing and will work with the Policy and Strategic Planning Unit / think tank, and with the Financial Advisor of the Department. Norms for health services based on adequacy of services and quality will be developed as guidelines for budget formulation.
- ii) The focus will be to remove disparities, whether geographical, gender, age or any other, focussing on the economically and socially deprived sections, bringing about greater equity. Parameters would be evolved for rational allocation of funds to districts and sub-regions to ensure equity in availability of services.
- iii) Capacity building at all levels for dealing with finances through training. Delegation of financial powers to state programme officers, district CDMOs and institutions, and ensuring that these powers are used optimally, through performance appraisal and reviews.
- iv) Release of funds and sanction orders will be attempted to be done in time wherever. Funds will not be allowed to lapse.
- v) Continuous expenditure analysis against physical achievements and budget provisions. Quarterly or monthly cumulative variance analysis will be done.
- vi) Strengthen line budgeting and accounting systems with outcome indicators and establish a health-financing database.
- vii) Accounting systems will be developed, learning from the National Health Accounts Systems that is being developed.

2. Developing suitable financing options that effectively address equity, risk pooling, cross subsidy and more efficient and equitable use of private expenditure on health

- i) Develop appropriate insurance schemes, including community and social insurance. These will be piloted in one or two districts, learning from experience in other parts of the country. The state will develop adequate regulatory measures to assure intended benefits to the insured. Possibility of linking with self-help groups will be explored after collecting adequate information and studying feasibility.
- ii) Conduct studies and workshops on health financing and financial sustainability.
- iii) Develop user fee guidelines based on careful study of the impact, and mechanisms of operating the user fee, ensuring that people below the poverty line are not asked to pay and yet are able to get all the needed services. Lower middle class families also need support. Ensure that the user fees collected are utilized promptly and rationally by the institutions collecting them.

- iv) Try and enhance community support to peripheral institutions such as PHCs, which are to be seen as community institutions and assets rather than government institutions. Good quality care with community involvement will help build community ownership, through which local human and financial resources can also be raised, with necessary accounting systems.

3. Exploring ways to enhance public resources available, improve allocative efficiency and work towards financial adequacy in the health sector by 2010

- i) Introduce steps to increase the resource consciousness of policy makers and managers at different levels.
- ii) Identify performance gaps in service delivery, estimate the financial gaps for quality improvements and provide evidence-based justification for increasing state budget provision. The department will provide evidence of capacity to ensure effective utilization of additional resources from the budget.
- iii) Develop a system of need-based sectoral allocation. Adequate allocations will be made for non-salary operation and maintenance, including repairs of vehicles, equipment and buildings, drugs and consumables and for supervisory visits.
- iv) Undertake ongoing resource mapping exercises.
- v) Additional resources will be mobilized from State, Centre and external sources with care taken to ensure that the debt burden is not increased beyond the capacity of the State to repay. Central allocations for various programmes will be fully utilized.

The strategy is based on the following assumptions:

	NHP targets	Current Level in Orissa
Public expenditure as a share of GSDP	2% of GSDP by 2010	1.09% (1999-00)
Share of State public expenditure on health	7% by 2005, 8% by 2010	5.07% 1999-00 6.3% (2000-01)
Allocation of resources to levels of care	55% to Primary 35% to Secondary 10% to tertiary	51.8% 24.5% 23.6%
Share to non-salary components	30%	15% (inclusive of in-kind, user fee etc)

4. Conducting periodic reviews of financing strategies to ensure responsiveness to the stated end objectives of poverty reduction, risk protection, equity and gender sensitivity

- i) Comprehensive reviews of the adequacy of the financing strategies and the financial reporting and accounting systems will be undertaken.
- ii) A financial database will be built up as part of the comprehensive health MIS.
- iii) Qualitative and quantitative impact and expenditure tracking studies will be done.

CHAPTER 7.5

MANAGEMENT OF HEALTH CARE EQUIPMENT

A. Introduction

Equipment and instruments are important inputs for health care services. Their availability in good working condition is vital and can be lifesaving. They must be operated by skilled users and should not remain idle.

With technological developments, newer, more costly diagnostic and therapeutic equipment become available. It is necessary to assess their usefulness and relevance to health care in the State.

The management of equipment and instruments based on materials management concepts; involves planning, review and control with:

- demand forecasting, planning and budgeting;
- economical procurement, receipt, inspection, acceptance and payment;
- storage and inventory control;
- avoidance of pilferage and damage;
- distribution, according to needs and installation;
- use at the appropriate level by skilled / trained persons;
- maintenance (preventive and repairs); upgradation;
- condemnation and disposal of useless items and those, which cannot be maintained in good working condition.

B. Situation Analysis

The Health and Family Welfare Department, maintains a stock of a large variety of equipment and instruments at different service locations. Very little consolidated information is available with reference to their number, type, use, location, age, cost and condition. The department at present does not have a comprehensive policy or guidelines regarding procurement, use and maintenance of medical equipment. The roles and responsibilities of health personnel for management of equipment need to be defined and streamlined. The utilization of medical equipment and instruments is fairly low. There are no comprehensive maintenance manuals or handbooks available to guide users in operation and maintenance. Poor inventory and maintenance management systems coupled with duplication of supply from multiple sources, with inadequate central co-ordination has resulted in overstocking of large quantities of idle instruments and equipment. Very slow condemnation processes have resulted in stockpiling of dead stocks.

A facility survey of equipment and instruments was conducted by ELMARC Ltd, Bhubaneswar in 1997. It provides some basic information for systems development.

C. Objectives

1. To improve the management system for health care, equipment in the department, focusing on need based, cost effective procurement, maintenance and civilization.
2. To extend the useful life of equipment and instruments, reducing wear and tear and deterioration by adopting preventive maintenance.

D. Strategies

1. Make available quality equipment and instruments through transparent process of procurement

- i. Assess the need for equipment and instruments of the various health care institutions and programmes, and establish norms based on expertise available and other factors.
- ii. Survey the equipment and instruments in health institutions, once every five years on a rotation basis to determine availability and working condition and the need for repairs and maintenance.
- iii. Identify and correct deficiencies of equipment and instruments at all levels by procurement of new items through a transparent process. Items will be supplied only as per the needs of the end user. This is especially important in the case of sophisticated equipment, where expertise is needed.
- iv. Ensure that all necessary infrastructures - civil works, electricity, plumbing, etc - are in place before equipment is supplied. Availability of needed reagents and chemicals, and license where needed will be assured.
- v. A system will be established for the management (procurement, installation and maintenance) of equipment and instruments either by setting up a state level organization or by hiring the services of existing organizations. The organization should have sufficient authority, expertise, tools and funds.
- vi. Posts of biomedical engineers will be created in the headquarters and in the larger institutions (medical college hospitals) and filled up preferably on a contractual basis.

2. Maintain the equipment and instruments in good working condition ensuring optimal utilization and minimizing down- time

- i. Make full use of the warranty by early installation and annual maintenance contract. Ensure that the manufacturer and supplier / dealer are bound by the warranty and have enough spare parts.

- ii. A proper inventory system and a management information system for all equipment and instruments in the various institutions and programmes will be established.
- iii. Have a procedure for condemnation and disposal of equipment and instruments, which cannot be put into working order (beyond economical repairs). On a rotation basis, every health instrument could be surveyed once every five years to catch up on condemnation and disposal.
- iv. Equipment and instruments will be standardized to the extent possible to make it economical and easy for maintenance. It would also facilitate interchangeability of components and ensure lower purchase cost.
- v. Have adequate budgetary allocations for the procurement, repair and maintenance of equipment and instruments.
- vi. Ensure that built-in safety factors are included while ordering, e.g., anaesthesia apparatus.
- vii. Follow all the principles of materials management as applicable to the equipment and instruments. The suppliers of major equipment will be made to supply operation and maintenance manuals, so that minor adjustments can be made by the users to make the equipment work well. Inspections will be carried out periodically (preferably annually).
- viii. The users will be given training in the maintenance of the equipment and instruments by the supplier or other suitable agency. When there is a change in personnel, the new person(s) has to be trained. This will reduce breakdown of the equipment. Ensure that the required technical staffs are in position.
- ix. The suppliers will be asked to make good the loss due to downtime during the period of warranty; alternatively, they will be asked to provide standby equipment of similar or better specifications.
- x. The Health department will produce a manual of instructions for indenting officers regarding procedures for procurement of equipment and instruments. The specifications will be explicit and complete, ensuring that they do not favour a particular firm or manufacturer including receipt, inspection, acceptance, payment and installment.
- xi. The suppliers of equipment and major instruments to be asked to supply operation and other manuals for the smooth running of the equipment.
- xii. The Department to have a well-equipped and well-manned maintenance unit, with sub-units in the districts. Alternatively the feasibility and comparative costs of engaging an equipment agency may be explored.
- xiii. A Board will be constituted in major health care institutions to review the functioning of equipment and for condemnation and disposal, for which a manual will be produced.

CHAPTER 7.6

STRENGTHENING CONSTRUCTION AND MAINTENANCE OF BUILT ASSETS

A. Introduction

Availability of appropriately designed, well built and well-maintained buildings is a pre-requisite for ensuring effective service delivery in the health sector. Buildings are needed for health care institutions (sub centres, primary health centres, community health centres and hospitals), stores and offices at districts and headquarters. Residential accommodation is needed for key personnel such as ANMs at sub centres, medical officers, laboratory technicians, nurses and other staff, so that they are available for service at all times.

B. Situation Analysis

Barring a few buildings constructed recently with external aid, most of the buildings are old and in disrepair. The buildings are maintained by the Public Works Department (PWD) in urban areas and Rural Development Department (RDD) in rural areas. There is paucity of funds allotted for maintenance. Funds available are only 20-30 per cent of the requirements for annual maintenance, and spending occurs mainly to meet emergencies. Regular, periodic maintenance is neglected. By undertaking needed repairs with infusion of sufficient funds, buildings will be brought to a stage where they become maintainable through routine annual maintenance.

There is lack of co-ordination between users (the health department) and departments taking up maintenance works. Centrally controlled PWD and RDD may not be the ideal organizations to undertake maintenance works in remote rural areas. Users must be fully involved in repairs and maintenance to suit their needs. Involvement of communities and local bodies in upkeep of health institutions that are community assets is important.

New buildings are needed for the sub centres, PHCs, CHCs and hospitals and for offices. The shortage is most acute with respect to the peripheral health care institutions. In addition, more primary health centres are to be established in tribal areas to improve access to health care, requiring more built space. Block PHCs are to be converted into CHCs so that they can serve as referral centres. There will be an additional requirement of built space for these.

There is also acute shortage of residential accommodation in urban and rural areas. More than sixty percent of ANMs who are the most important link in providing service in rural and remote areas have no place to stay and work. Approximately 3500 sub-centre buildings, each with a built up area of 64 sq. meters will have to be

constructed. The shortage of residential accommodation for doctors and other paramedical personnel is acute. More than 2000 of these workers lack residential accommodation. The minimum number of quarters will be made available urgently in critical locations. It has been assessed that about one million square meters of additional space has to be built at the earliest, as follows:

Additional operational and storage space for health institutions	(Million Sq. Meters) 0.32 M.sq.M
Sub-centres	0.23 M.sq.M
Residential accommodation (6000 houses)	0.45 M.sq.M
Total	1.00 M.sq.M

C. Objectives

The overall objective is to ensure availability of adequate physical infrastructure in a cost-effective manner, to meet the health care needs of the state. More specific objectives are:

- i. To have adequate built space for accommodation of acceptable quality for health care institutions (starting with sub centres and primary health centres) of different types, according to needs and norms, through:
 - a) construction of new buildings, where buildings are not available in existing institutions
 - b) construction of buildings for additional PHCs to be established, with particular emphasis on institutions in tribal localities
 - c) renovation / repairs of existing buildings, and
 - d) use of hired accommodation where possible
- ii. To have residential accommodation for all key health personnel (doctors, nurses, ANMs, laboratory technicians), especially at peripheral institutions, such as Primary Health Centres and sub centres. Sub-centre buildings are meant for both residential and service delivery purpose.
- iii. To ensure regular, periodic maintenance of all buildings, with allotment of sufficient funds and their utilization, under control of local bodies / committees.

D. Strategies

1. Assess requirements and costs for new constructions and major and minor repairs

- i. Undertake a survey of building assets in the health sector and workout requirements for new buildings for health care institutions (according to norms), residential accommodation and offices, with priority for sub-centres and primary health centres. Opportunity will be taken for proper distribution and rationalization of PHCs and sub -centres based on accessibility, population covered and distance. When new construction is planned, the site will be chosen in consultation with users and the

community. Location will be chosen to optimize coverage. Norms will be rationalized. Appropriate architectural designs will be selected. Cost of construction and stipulated time frames will be worked out.

- ii. Identify buildings, which require renovation and extensive repairs and the extent of repairs; determine which buildings can be utilized with minor or no repairs. Develop cost estimates for repairs.
- iii. A resource mapping exercise will also be undertaken to identify available funds from the central and state public sector, possible new sources of funds including donations in cash or kind, donor agencies and possible community funding (like the local fund dispensaries – LFDs).
- iv. A prioritization of areas in greatest need where construction will be taken up first eg. eleven KBK plus districts, cyclone prone areas.
- v. Cost effective design and construction technologies will be used, to reduce excess unnecessary built space that is wasted and using local materials where possible.
- vi. Introduce hiring of buildings where required and possible.
- vii. Negotiate the required funds through budget allocations or other sources; and carry out the construction and repairs within a time frame.

2. Develop systems for construction and Maintenance of Built Assets

- i. Carry out regular, period (annual) maintenance of all buildings, ensuring availability of sufficient funds. It is considered counter productive to cut maintenance funds. Annual maintenance costs of built assets will be estimated.
- ii. Facilitate introduction of a system for routine inspection of buildings and supervision of construction, repairs and maintenance. Responsibility will be shared between the Health Department, Panchayati Raj Institutions, Zilla Swasthya Samitees, Public Works and Rural Development Department. The prime responsibility will rest with the Medical Officer in charge of the premises. The administrative medical officer will be empowered to carryout essential minor works.
- iii. Introduce periodic reporting by the Administrative Medical Officer on the state of the buildings standardized on a format, which will be developed.
- iv. Capacities will be developed in Panchayati Raj Institutions and Zilla Swasthya Samitees to be involved in the construction, maintenance and upkeep of buildings, as also the cleanliness of the buildings and premises. They will eventually take over full responsibility for such work, especially in rural areas.
- v. Constitution of active, local committees to advise and help the administrative medical officer regarding the maintenance of buildings and premises.
- vi. Steps will be taken to reduce corruption in construction and repairs – by making public the tendering system, choice of contractor / company and costs involved.

CHAPTER 7.7

HEALTH SECTOR TRANSPORT MANAGEMENT

A. Introduction

Transport is a key component in providing mobility for the timely delivery of health services. Vehicles are needed for:

- movement of health personnel for service delivery, supervision and monitoring of health services;
- transport of patients for emergencies, referrals, and to access health care; and
- transport of drugs, equipments, instruments and other essential materials from the sources or stores to peripheral units.

Expenditure on transport ranks high next only to salaries and drugs. It includes capital for acquisition of vehicles and recurring expenditure for petrol, oil and lubrication, repairs and maintenance. To curtail costs and ensure availability of transport when needed, alternate transport options will be explored. Wastage and misuse of vehicles for private purposes or purposes other than health care will be minimized.

In management of the transport system, the possibilities of decentralization of responsibilities, simplification of operational procedures and greater accountability of users will be explored and introduced.

B. Situation Analysis

The State Health and Family Welfare Services own a fleet of about 1600 vehicles to support the delivery of health care services through the network of health care institutions at primary; secondary and tertiary levels.

The larger share of the total vehicle pool is from the Government of India and other donors for various health programmes. The financial burden on the State Government for capital investment is relatively small. The expenditure by the State Government is towards fuel, maintenance, and repairs and for salary increases.

Vehicles by source of supply (15.1.2000)

1. Government of India	:	29%
2. Government of Orissa	:	17%
3. Donor Agencies	:	48% *
4. Others	:	6%

		100%

* ADB – 22%, UNICEF - 13% UNFPA / WHO – 5%, World Bank – 4%, DANLEP/DANTB – 4%

A survey by the Orissa State Health Transport Organization of 426 vehicles used in eight districts revealed distressing facts. 35% of the vehicles were off the road, marked for condemnation, and 4% were nonfunctional needing major repairs. The proportion of vehicles for condemnation ranged between 17.6% and 45.2% in various districts. This reflected the inefficiency of the existing condemnation and disposal system. Further, 28.4% of functional vehicles have already crossed 10 years, the permissible replacement period for Government of India vehicles. This calls for a massive renewal of the transport system. A systematically planned procurement and replacement system is called for to ensure smooth continuity.

Often, vehicles are out of use for want of funds for running expenses or the vehicles are not in running condition, needing repairs. Prompt maintenance with allocation and release of funds can reduce non-availability of vehicles for use in the various programmes.

C. Objectives

To improve health service delivery by effective and optimum use of vehicles, both owned and hired.

D. Strategies

1. Improve the management of the departmental transport system

- i. Determine the real needs for vehicles by the department (present and near future) and provide vehicles, with personnel and budget provisions for capital and recurring expenses. Hiring of vehicles will be considered where more cost effective. A system with procedures for hiring at different levels will be established.
- ii. Develop a simple Management Information System (MIS) with respect to the number and types of vehicles available; those in good running condition those needing repairs and maintenance; those out of order for condemnation and disposal. The MIS will help the operational management of the workshops.
- iii. Establish and maintain a well-structured multi-level computerized transport database for vehicle inventory, condition, age, repair, utilization, allotment, expenditure etc.
- iv. Strengthen the departmental state and district level transport organization and workshop for vehicles of the Department, with qualified and experienced persons (technical and management) in charge; and redefine their roles and responsibilities to support transport management.

- v. Conduct regular training of drivers, mechanics and maintenance personnel.
- vi. The organization will be equipped with the necessary machinery and tools for routine repairs, servicing and maintenance.
- vii. Establish a system for recognizing other reputed workshops for carrying out major repairs at reasonable cost. Systematic, phased and selective outsourcing of repair and maintenance work will be done.
- viii. A common vehicle pool and scheduling system will be established.

2. Improve utilization of vehicles and reduce misuse, idling and wastage

- i. Fix responsibility for routine servicing of vehicles.
- ii. Reasonable norms will be fixed for expenditure on maintenance and repairs with appropriate allocations and release of funds.
- iii. The allocation for running expenses (POL) will be made adequate, realising that idle vehicles adversely affect vital health programmes.
- iv. Standardize vehicle make / model, while procuring new vehicles, to allow economy in procurement, operation, servicing, spare parts and maintenance.
- v. Decentralize and simplify condemnation and disposal procedures, to minimize wastage and improve cost recovery.
- vi. The possibility of the Zilla Swasthya Samitee providing well-equipped ambulances in good running condition will be considered.
- vii. Mobile health units (MHUs) in KBK and other tribal districts will be brought under the direct management of PRIs. The local bodies will be encouraged to establish more MHUs in needy areas using their own resources.

CHAPTER 7.8

DRUGS MANAGEMENT, CONTROL AND RATIONAL USE

The strategies dealing with pharmaceuticals have three major components, namely, drugs management, drugs control, and rational use of drugs, which are dealt with separately. Drugs management addresses largely the management of drugs in the Government health care institutions at all levels and for various health programmes. Drugs control addresses legal, regulatory and allied issues in all sectors. Rational use of drugs involves the individual (user), the prescriber, the pharmacist (chemists and druggists), the manufacturer, supplier and the government.

Section 1

Drugs Management

A. Introduction

The purpose of drugs management in the health care system is to make available quality drugs and other pharmaceuticals needed for patient care (inpatient and outpatient), immunologicals (for preventive care) and diagnostics. Effective and safe drugs with good benefit: risk ratio must be made available in the right formulations and dosage at affordable prices (free for those who cannot afford to pay).

Drugs form an important component of health expenditure, next only to salaries and wages. Drugs are crucial for treatment, cure, pain, relief, and prevention. Lack of adequate drugs adversely affects service quality, credibility and patient satisfaction. Drugs management estimates types and quantities of required drugs, makes them available to health care institutions and health programmes (like immunization), avoids idle inventory, and disseminates information among users.

B. Situation Analysis

Orissa has already developed an operational, comprehensive drugs management system. In 1997, reforms in pharmaceutical policy helped make quality drugs available and accessible for all sections of the people within the limited budget. The first essential drug list for Orissa was published in 1998 after introduction of the Drug Inventory Management System. The present essential drug list (3rd edition, 2002) contains 290 items. Standard Treatment Guidelines have been published. Quantification of drug requirements by the districts, tendering and centralized procurement systems, quality control, online inventory control and

distribution systems through district warehousing are in place. Drug availability in the periphery has improved and wastages reduced. The implementation was evaluated and corrective action taken. However the budget is inadequate, leading to shortages due to which medical officers have to give outside prescriptions.

C. Objectives

1. To make available effective, safe drugs in required quantities and appropriate dosage forms with acceptable quality, to all public health care institutions, on time.
2. To ensure that good quality drugs are procured at the least cost.

D. Strategies

The existing drug policy and provisions will be implemented and developed further.

1. Drug selection

- i) Essential Drug Lists for different levels will be updated periodically, with professional inputs and feedback.
- ii) Standard Treatment Guidelines will be adhered to in all health care institutions, particularly peripheral institutions. Training will be conducted for medical officers.
- iii) Formularies will be prepared for secondary and tertiary health care institutions.

2. Procurement and distribution of drugs

- i) All relevant rules and procedures for materials management as applicable to drugs will be followed.
- ii) Finalization of the list and quantities with the help of technical experts and inputs from medical officers in peripheral health care institutions through the districts.
- iii) There will be open tendering with transparency.
- iv) A suitable rate contract will be worked out, used and the system reviewed.
- v) The drug budget will be reviewed and revised realistically.
- vi) Optimal use of financial and other resources will be ensured.
- vii) The need to set up an autonomous or semi – autonomous drug management unit to enhance efficiency will be explored.
- viii) Logistics and transport system will be improved.

3. Infrastructure

- i) The online drug management inventory system will be fully utilized and updated, avoiding stock-outs.
- ii) Warehousing and storage facilities at different levels will be further upgraded to avoid deterioration and pilferage.
- iii) Qualified and experienced staff will be made available and provided opportunities for professional growth.

4. Monitoring

- i) Continuous monitoring of drug management, use of transparent and efficient procedures in procurement, distribution and payment to suppliers will be ensured.
- ii) Periodic management checks and evaluations will be conducted. Regular user response will be collected from random or sentinel centres.

Section 2

Drugs Control

A. Introduction

The State Drugs Controller and staff are responsible to ensure the quality of drugs. It is estimated that about 20% of drug formulations in the market are spurious or substandard and are useless or even harmful. The unit inspects and tests drug samples from medical stores, hospitals, nursing homes, clinics, drug manufacturing units and blood banks, and ensures transparency and accountability in Drugs Regulations.

B. Situation Analysis

The sources of drugs supply in Orissa are given below.

Sources of Supply of Drugs to the State

State Mfg.	Outside State Mfg.	Imported	
		Distribution Channel	
Through Govt. Hospitals	Private and Public sector hospitals	Nursing homes and clinics etc.	Licensed wholesale / Retail counters
			Quacks and unlicensed premises

Table 1. Drugs Sales Manufacturing Units, and outlets in Orissa

	Existing Units in the State
1. Sales Establishment (Retail & Wholesale)	15041
2. Manufacturing units (including cosmetics units, disinfectants, bulk drugs & surgical dressing etc)	340
3. Blood Banks	59
4. Hospitals / Nursing Homes / Clinics	3000 (aprox)
5. Storage and sale in unlicensed premises / Quacks	

Due to lack of infrastructure quality control tests are insufficient. There are currently 24 Drugs Inspectors instead of the required 194 in the State. Testing is carried out by the State Drugs Testing and Research Laboratory (SDTRL), Bhubaneswar and Central Laboratories like C.D.L., Kolkata, C.I.P.L., Ghaziabad, C.R.I., Kasuli and I.V.R.L., Izatnagar. Many types of drugs are not tested due to non-availability of the required microbiological, pharmacological, biochemical and phytochemicals sections at SDTRL, Bhubaneswar. The approved testing laboratories outside the State do not accept routine samples of these categories of drugs, except for samples drawn on complaint basis and only on prior intimation and persuasion.

C. Objectives

1. Ensure drugs of assured quality, purity and strength, packed suitably to preserve potency, are available at fair price.
2. To ensure that banned drugs, misbranded, spurious drugs, or adulterated drugs are not available in the market and that labeling, storage and preservation of drugs at appropriate temperatures are carried out properly. To screen the market to detect fake or counterfeit drug formulations. To screen the market to detect the stocks /

movement / sale of spurious drugs on the basis of reports received from the Drugs Controller General, India and other State Drugs Controllers.

3. To verify the records / registers / bills pertaining to purchase and sale of drugs. To confirm whether the conditions of licenses as laid down in the Acts and Rules are followed by the licensees.
4. To verify the quality of drugs by tests and analysis. In the case of manufacturers of drugs in the state, to assure that all the Good Manufacturing Practices and other requirements are followed.

D. Strategies

1. Strengthen institutional capacity of the state drug control authority

- i) Increase the number of qualified drugs inspectors, one for each district, with separate Drugs Inspectors for cities like Bhubaneswar, Berhampur and Rourkela. All the required posts will be filled up.
- ii) Establish intelligence-cum-legal machinery with inspectorate staff and transport. An Intelligence-cum-Legal Cell, exclusively or the Drugs Control Department will be established. This will help in carrying out prosecutions more effectively.
- iii) Strengthen the headquarters and zonal offices of the range Drugs Inspectors, through the provision of staff, vehicles and other infrastructure. Strengthen the Zonal Deputy Drugs Controllers' Offices at Sambalpur and Berhampur.
- iv) Computerize the Drugs Control Department; develop efficient communication facilities; develop and establish effective drug recall procedures.
- v) Provide infrastructure facilities to the State Drugs Testing and Research Laboratory (SDTRL), Bhubaneswar with equipment and machinery, reagents and qualified staff. Microbiological, pharmacological, biochemical and phytochemical sections will be developed in the laboratory.

2. Strengthen functional drug control mechanisms

- i) Only companies adhering to WHO's Good Manufacturing Practices (GMP) will be selected.
- ii) Surveillance of suspect manufacturers, unlicensed dealers and quacks will be undertaken.
- iii) Regular inspection of blood banks will be conducted by specially trained Drugs Inspectors, keeping in view the guidelines of NHRC, the Drugs Controller General, India and the Drugs and Cosmetics Act and Rules.

- iv) Regular inspection will be done of licensed premises, manufacturing units, hospitals, nursing homes and clinics.
- v) Ensure adequate budget allocation to carry out the responsibilities.

Section 3

Rational Use of Drugs

A. Introduction

Rational Use of Drugs requires that patients receive medicines appropriate to their needs, in doses that meet their individual requirements for an adequate period of time and at the lowest cost to them and their community. Rational use of drugs includes the following criteria: there is an indication for the use of this particular drug; the drug is appropriate considering efficacy, safety and suitability; the dosage, mode of administration and duration of treatment are appropriate; there are no contra-indications or likelihood of serious adverse reactions; the drug is dispensed correctly, with adequate information for the patient; and the patient adheres to the treatment.

B. Situation analysis

Irrational use of drugs is widespread in the country, due to many reasons, including the manufacture of irrational drugs and irrational combination of drugs, unethical promotion of drugs, irrational prescribing (over prescribing, under-prescribing or unwanted prescribing), irrational dispensing (without adequate information) and irrational use by the patients and the public. Non-compliance by the patients can have adverse consequences: treatment failure, relapses, microbial resistance, increased risk of transmission of communicable diseases and increased cost, loss of work and earnings. Self-medication is common, with over-the-counter drugs and even prescription drugs, due to socio-economic factors, life style, ready access to drugs etc.

C. Objectives

1. To ensure that implementation of essential drug lists and ethical promotion of drugs are followed.
2. To ensure rational prescribing and rational use of drugs by the consumer.
3. To introduce pharmacovigilance to monitor adverse drug reactions.

D. Strategies

1. Educational approach

- i) Organize / support / encourage the training of prescribers and dispensers (formal and continuing education, supervision, seminars and workshops).
- ii) Produce and disseminate printed material (clinical literature, newsletters, treatment guidelines, drug formularies, information leaflets). Various other media forms will be used.
- iii) Promote personal contact (educational outreach, patient education, prescribers, opinions of leaders in medicine) through the public, voluntary and private sector.
- iv) Conduct training on prescribing approaches and use of standard guidelines for diagnosis and treatment.

2. Regulatory mechanisms

- i) The drug registration and re-registration system will be streamlined.
- ii) Essential drug lists will be widely disseminated in the public, voluntary and private sector.
- iii) Standard norms of prescribing will be followed, restricting irrational use.
- iv) Dispensing guidelines and regulations of Government of India and Pharmacy Council will be followed.
- v) A drugs and therapeutic information service will be initiated supported by medical colleges. A pharmacovigilance unit to monitor adverse reactions will be established.
- vi) Cost of therapy will be reduced by continuing the use of generic drugs instead of brand names for prescribing, ordering, purchase.
- vii) Polypharmacy will be avoided. Guidelines for the use of antimicrobials, analgesics, antihypertensives and other similar drugs to make optimum use of the drugs will be made available to prescribers.
- viii) Compliance (adherence to the treatment) will be encouraged through patient education.
- ix) Misuse of drugs, will be minimized.
- x) Prescription audits will be done.

CHAPTER 7.9

DISASTER MANAGEMENT

A. Introduction

Disasters and emergency situations result from several causes. These include natural disasters (though many underlying factors can be traced to human activity); environmental hazards; human made disasters such as riots and conflicts; fires; industrial, agricultural and mining accidents; road, rail or plane accidents, etc.

Globally and in India, there is an increase in knowledge, skills and capacities in disaster preparedness and response. The Department of Health recognizes that it has a major role to play and gives it high priority in its planning.

B. Situation Analysis

Orissa has a history of repeated disasters, both sudden and conspicuous as well as and prolonged and silent. In addition it is also prone to disease outbreaks and epidemics.

Since the 1990s natural disasters have been a regular feature in Orissa as illustrated in Table 1. The toll of mortality and morbidity caused by these disasters has been very significant. While the loss of property and the erosion of developmental gains cannot be minimized especially during sudden disasters; deaths and diseases due to disasters could be greatly minimized with a high level of emergency health preparedness and swift response.

Table 1: List of Natural Disasters and their Impact in Orissa since 1990

Month & Year	Hazard	Damages
August 1991	Floods	Many lives lost
August 1995	Floods	Widespread loss of human lives
May-June 1998	Heat Wave	About 1000 deaths due to heat stroke
May- June 1999	Heat Wave	About 100 deaths due to heat stroke
October 1999	Cyclone	Nearly 10,000 people lost their lives.
May-June 2000	Drought	In 28 districts
July 2001	Floods	24 districts affected
May 2002	Heat Wave	Some deaths due to heat stroke

The government of Orissa through the agency of the Orissa State Disaster Mitigation Authority (OSDMA), supported by the central government, bilateral and multilateral donors, has implemented various restoration activities following the super -cyclone and continues to implement various mitigation and preparedness activities. The Department of Health and Family Welfare has been involved in preparedness and contingency planning measures of the government at state and district level. The past few disasters occurring in succession have raised the level of awareness among the people, the will to act among the political and administrative strata and the inclination of donor and United Nations agencies for supporting disaster preparedness initiatives in the state. The health department wishes to seize this opportunity to achieve a focused development of capacity and institutionalization of these initiatives through the articulation of clear objectives and strategies to achieve them. The sector realizes that if disaster preparedness and emergency response processes are not integrated in the routine services of the department, and dovetailed with the various reform initiatives, the developmental gains achieved in the sector at great effort and cost will be lost due to future disasters to which the sector is still vulnerable.

Table 2 Health Effects of Anticipated Hazards

Health Effects	Cyclone	Flood	Epidemics	Drought	Earth Quakes	Land Slides	Heat-Stroke
Deaths	High	Low	Many	Few	Many	Many	Many
Severe Injuries	Many	Few	Few	Few	Many	Many	Few
Increased risk of epidemics	Yes	Yes	Yes	No	Yes	Yes	No
Damage to water systems	Yes	Yes	No	No	Yes	Yes	No
Damage to health facilities	Severe	Mild	No	No	Severe	Severe	No
Demand of health services	High	High	High	Mild	High	High	High
Food shortage	Common	Common	Varies	Common	Common	Common	Varies
Major population movement	Common	Common	Not-Common	Common	Common	Common	Not-Common

The impact of disasters on the health situation differs depending on the type, severity and magnitude of disasters. The differential impact is also because of the economic and political scenario of the affected area and the degree to which its infrastructure is developed.

C. Objectives

The overall objective is capacity building of the health sector in disaster preparedness and emergency response to reduce mortality and morbidity caused by disasters; and to effectively respond to health needs of vulnerable groups in all types of emergencies with their full participation.

The health sector is seen in totality, including the public, voluntary, private, ISM&H and informal providers. The most vulnerable groups are children, pregnant and lactating mothers, elderly, disabled persons, low-income and socially deprived groups- particularly the underprivileged in rural areas and urban slums- who bear the brunt of the lack of services due to slow recovery of a health system ill-prepared for disasters.

Specific objectives of capacity building are:

- To ensure a high level of preparedness to meet disasters and emergencies.
- To ensure efficient and rapid delivery of emergency and follow-up health services following disasters. This will include medical, public health, psychosocial and rehabilitative components.
- To increase the level of resilience of the health infrastructure against disasters.
- To enable the health system to recover rapidly following disasters.
- To facilitate the participation of civil society organizations and groups.

D. Strategies

1. Develop comprehensive and contingency health preparedness plans for disasters for the state and all districts.

- i) District specific contingency plans will be developed with specific vulnerability and risk profile/mapping. Districts at special risk will be covered first. Emergency and follow up response plans will be outlined. A tabular format of districts at risk for different disasters will be developed.
- ii) Various early warning, command and control response systems, needs assessment, delivery and recovery protocols and action plans contingent on the type of disaster will be developed, and field tested. There will be ongoing development, review and improvement of plans.
- iii) Plan development will be in the context of overall district disaster preparedness plans of various sectors and at tehsil and panchayat levels in highly prone areas.
- iv) Detailed operational/action plans will include production of manuals and checklists for different levels of personnel, for different types of disasters that occur more frequently in Orissa.

2. Strengthen Emergency Health Control Rooms

- i) The State Disease Surveillance Cell housed in the Directorate of Health Services functions as the State Health Control Room during emergencies. The infrastructure and human resource of this cell will be strengthened to

- undertake this dual role. During emergencies district level control rooms are also established and will need support.
- ii) Each Chief District Medical Office will be provided adequate space, information and communication infrastructure, mobility support and trained personnel for rapid establishment of an efficiently functioning control room during emergencies. Most vulnerable districts will be covered first.
 - iii) Protocols and procedures for the seamless integration of the emergency control rooms, the disease surveillance cells and task forces at state and district level will be ensured during disaster prone periods.
 - iv) The disease surveillance cells and district task forces are pivotal in the detection and control of disease outbreaks and epidemics which are emergencies in their own right, as well as potential occurrences following other natural hazards. The strengthening and capacity building of the disease/public health surveillance system is thus of crucial importance during periods of normalcy as well as disasters.
 - v) Protocols and mechanisms to integrate the temporary emergency control rooms of the health department with the permanent general emergency control rooms of the state and districts will be established.
 - vi) Mechanisms for receiving early warning signals from the permanent control rooms by the health department will be developed so that the temporary emergency control rooms of the department can become operational in the pre-disaster phase itself proactively rather than being established reactively after a disaster has struck.

3. Build institutional capacity

- i) Medical college hospitals and district headquarter hospitals will be strengthened to provide special emergency services at short notice. The annual plans of these hospitals should cover these contingencies.
- ii) Rapid response teams for disasters will be developed and trained. Psychosocial public health and rehabilitative components will be developed through linkages with existing national resource groups such as the National Institute of Mental Health and Neuro Sciences, Bangalore, JIPMER – Pondicherry, NGO groups such as the OXFAM India Society, etc.
- iii) In districts where the head quarter hospital is not easily accessible to all blocks, additional hospitals (sub-divisional hospitals/ CHCs etc) should be designated and strengthened so that access to all areas of a district is ensured.
- iv) The necessary skilled manpower; communication, mobility, treatment, instrumentation, emergency medical supplies and logistics infrastructure will be ensured to these institutions after careful needs assessment and in line with the health preparedness and contingency plans of the districts.

4. Meet human resource needs

- i) Health personnel at all levels will be trained in basic disaster preparedness and emergency response, with the use of preparedness and contingency plans, including simulation drills where feasible. Personnel from the public, voluntary, private, ISM & H and informal health sector will be selected specifically on a voluntary basis for special training in health management in emergencies. They can play the lead when needed.
- ii) Federations and networks in the voluntary and private sector will be involved.
- iii) All training opportunities available at state, country and international level will be identified, and those volunteering facilitated to attend them by the department.

5. Meet information needs

- i) Unless relevant and up to date information in an easily accessible, understandable and usable form is available and proper communication and dissemination of the information ensured, mitigation and response plans cannot be formulated and implemented.
- ii) The creation of computerized databases with information regarding vulnerabilities and risks of populations, health institutions and personnel; demographic parameters; availability and accessibility of health care institutions, health personnel; standby institutions and personnel; alternate routes of accessibility, drug management information system; availability of communication equipment and transport etc and their regular updating at various levels of the health sector is essential for preparedness and response.
- iii) The health authorities will facilitate the development of specific strategies to obtain, maintain, update and utilize this information at state and district level.
- iv) While the current information and communication technology resources including geographic information systems available with the department will be utilized for this purpose the gaps in availability of communication and information technology infrastructure will be identified and met thorough internal or external resources.
- v) Use of HAM radio and cellular phones will be planned for.

6. Meet coordination needs

- i) Both intra-departmental and inter-departmental coordination is essential for disaster preparedness and response. Intra-departmental coordinators

and coordination mechanisms, and inter-departmental liaison personnel and mechanisms will be well defined and widely disseminated. They will be empowered with sufficient authority.

- ii) Department plans and their implementation need to be in tandem with the state (OSDMA) and various line departments. This will be ensured by joint planning, training and simulation exercises at various levels.
- iii) The department will coordinate inputs of various actors including national and international voluntary organizations and volunteers from civil society.
- iv) Coordination responsibilities will be undertaken in a proactive manner. Mechanisms and channels of communications will be established with various agencies in normal times through formation of joint task forces etc. Failure to achieve this not only limits the response capacity that can be brought to bear in an emergency, but also holds real danger of hampering the efficiency of the department's response as experienced during the last few disasters.

7. Awareness creation and advocacy

- i) The Health and Family Welfare Department due to its wide reach and coverage and routine involvement in awareness building activities has a major role to play in awareness creation among people, for reduction of vulnerability to disasters. Since the health department has a huge material and manpower infrastructure the risk to the department itself is significant. The department will be an advocate for the reduction and mitigation of structural and systemic vulnerabilities in the governance, administration and societal spheres.

CHAPTER EIGHT (COMPONENT-IV): EMERGING INITIATIVES

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CHAPTER 8.1

COMMUNITY PARTICIPATION IN HEALTH SERVICE DELIVERY & MANAGEMENT

A. Introduction

Determinants of health are deeply embedded in the social, cultural, economics and political context of any society. Medical and health care is just one component of the many factors influencing health and wellbeing. Research studies as well as the Participatory Learning Exercise (PLA) organized under OH & FWRP helped to identify health as a function of overall development linked to employment, nutrition, education, water, sanitation, housing and environment.

Orissa has high concentration of scheduled tribes and scheduled castes, representing nearly 38% of the State population with wide cultural variations. A high degree of social vulnerability exists with low literacy, caste prejudice, geographical isolation, poor economy and women with an insular social life. Each social group has its own culture of health including traditional knowledge, attitudes and practices. Health is partly a function of the behaviour of the individual, family and local community. Community mobilization and participation for better health is one of the means towards positive societal change.

B. Situation analysis

The present health scenario of Orissa and some aspects of health service management and delivery can be over come with community involvement. Basic health needs of people such as adequate nutritious food, safe water, sanitation, and personal hygiene, can be met better with community involvement though the state and society have a major responsibility.

- Health care services are underutilized and there is a wide gap between government health care providers and the community. Almost 70% of the diseases are either preventable¹ or can be addressed without the assistance of a medical professional. Achievement of health objectives depend not only on technical support but also the awareness and decisions of the individual or family to avail the services.
- Lack of transparency usually leads to low level of participation and lack of ownership and accountability at all levels. Suspicion among the community about quality of services, dissatisfaction due to

indifferent attitudes, and perceived inefficiency of providers in public health institutions have resulted in lowering the community confidence in public health services.

- Health providers at grass root level work under great hardship, and are often constrained by inadequate financial resources and lack of flexibility in decision-making. Community involvement would be able to improve the situation and health facilities could be optionally utilized.
- "Community Participation" as a way to address the needs of poor and disadvantaged is not only a cost effective strategy, but also a way to strengthen equity, human rights and democracy in health system functioning.
- The Tenth National Plan documents promote community participation in developing local ownership of programmes, and achieving plan objectives. The GoO is also already committed to develop a strategy for "community participation" in Primary Health Care²

The concept of community participation has now evolved to mean the process of empowerment of the people for taking decisions for their own welfare, by providing information, technical support, and the potential for decision making³. This is very relevant to primary health care programmes where the most important action is at the community level.

This does not mean that health personnel or health services are being relieved of their responsibilities. The aim is to create a reasonable balance between the inputs of the community and that of technical experts and government. Better working with the community will lead to better benefit for the community and satisfaction for the service providers as well.

C. Objectives

1. To enable communities/people to take up health issues in a holistic manner for their overall well being by recognizing the voice of the community at all levels of service planning, implementation, monitoring, and evaluation, and enabling the mobilization of public opinion for adoption of the most appropriate policies in health.
2. To protect community needs and interests, and ensure a positive response to services by enhancement of community participation in decision-making processes, and to develop social accountability at all levels.

² MoU signed between GoO & GoI, under fiscal correction measures

³ Human Development Report, UNDP 1993, pp. 21

3. To provide good quality need based, demand driven health services and ensure optimum and equitable utilization of health services, across class, caste and gender divides.
4. To energize people to move forward from the role of passive recipients, to active participants at community level; and prepare for decentralization of health service delivery and management in response to articulated community need with cost effective interventions.

D. Strategies

Community participation will help develop a humane, accessible, affordable (cost effective) and accountable health care system.

1. Community empowerment as groups and individuals, by a four pronged approach

- i. Introduction of regular training, orientation, workshops and other necessary processes to sensitize health personnel and community members (through health committees and PRIs) in the concepts and skills of community participation to bring about changes in attitudes and behaviour and closer interaction.
- ii. Development of a communication/behavioral change strategy taking knowledge, attitude, practices and health seeking behavior of people into consideration. Broad based health education will be undertaken to involve people in health development through the following methods: regular consultations (Gramsabha, Panchayat meetings, PLA exercises at village level etc.); person-to-person communications; electronic media; by development of need based local specific IEC materials; and school health education.
- iii. Maintaining transparency across all activities beginning with relating health spending to budgetary allocations (variance statements) to developing accountability. This will be done by regular interactions, and display of information in public places; establishing structured mechanisms to ensure regular participation of health personnel in monthly meeting of PRIs at different levels; developing an effective "Information System" from State – District – Block – Panchayat level and vice versa.
- iv. Gradual decentralization of administration and management of different levels will be done through devolution to community structures through the following steps:
Gradual devolution of power to PRIs (for details see 7.3); using PLA (Participatory Learning and Action) as an effective planning tool; forming health committees at Gram Panchayats, PHCs and sub-centres; strengthening village Mahila Swasthya Samitees; enhancing the voice of the community by taking more members from the

community into the Zilla Swasthya Samitee (ZSS); Providing more autonomy to district and block level health teams to manage emerging issues (See decentralization in 7.3); involvement of PRIs in health needs assessment, IEC activities, site selection for health buildings, planning, execution, supervision and monitoring of construction and maintenance work, immunization programmes, environmental sanitation, and monitoring outreach services; institute proper mechanisms for periodical joint-performance review of health institutions and PRIs.

2. Partnership with NGOs and self-help groups

Partnerships will be established with NGOs and self-help groups involved in community based activities for programme implementation and supplementary resource generation

- i. Explore the possibilities of setting up drug shops at village/ institution level with the initiative of nonprofit organizations.
- ii. Facilitating community initiatives for health insurance.
- iii. Consensus building within the community on user fee collection.

3. Inter-sectoral approach to ensure people's participation

- i. Institutions will be enabled to develop effective inter-sectoral coordination at different levels with related departmental functionaries from PRI, Education, W&CD, RWSS, RD etc.
- ii. Mechanisms will be established to assess and address peoples needs.

4. Citizens' health charter developed with the community to act as a interface between the community and providers

- i. Service protocols will be developed as part of the HRD strategy.
- ii. The charter for health, based on the national people's health charter that was evolved at the National Jan Swasthya Sabha in December 2000, shall be adopted to suit Orissa's needs and contexts.

5. Health development to become responsive to community needs and suggestions, equity and resource availability

- i. Situational analysis and need assessment through participatory assessment.
- ii. Modification of existing programme according to need.

CHAPTER 8.2

PUBLIC – PRIVATE PARTNERSHIP

A. Introduction

The total health sector comprises of the public, voluntary, private and informal sector. Recent health sector reforms in Orissa have brought about a realization that the government's public health system cannot shoulder the responsibility of providing health services by itself in all parts of the state. The involvement of the private and non-governmental sector has become necessary to provide health services, especially in situations where the government is not in a position to do so, as in

- remote, backward or otherwise difficult areas.
- areas or groups not covered well by the public health system, but in need of health services e.g. street children, CSWs urban poor.
- inability of the government public health system to provide certain services for instance rehabilitation due to infrastructure, personnel and financial constraints.

B. Situation Analysis

The private health system is an important source of health care to the people of the state. A large proportion (60 - 70%) of outpatient care occurs in the private sector. A large variety of private institutions function, ranging from hospitals and nursing homes to clinics, dispensaries and pathological investigation centres. The voluntary health sector often works with more socially vulnerable groups. Some innovate with community-based approaches integrated with development. The informal sector comprises of local health traditions, a variety of folk healers and informal providers. To safeguard the interests of the health of the people of Orissa, regulation of the private medical system is necessary to maintain acceptable standards of care and service, and prevent unethical and socially undesirable practices.

The private and voluntary health system treats a large number of patients of all types, including patients suffering from communicable diseases. The official government health statistics do not take data from the private health system into account, so that the real health situation in the state is not reflected. They need to be part of the disease surveillance system.

C. Objective

The partnership is intended to supplement / complement the health care delivery system and public health efforts of the government and to share the responsibility for health care provision for people.

D. Strategies

1. Collaboration to facilitate interaction between the public and private health sectors and to encourage private sector to establish medical colleges

Collaboration will be established in areas, such as:

provision of specified health services by private institutions; participation in national health programmes by private institutions; involvement of private practitioners in the public health systems in routine health services; emergency situations, natural calamities, accidents and disasters; and training, re-training of health professionals, laboratory and paramedical staff. Specific areas of collaboration and cooperation between the public and private health care systems will be identified. Private sector will be encouraged to participate in the area of medical education by permitting establishment of private medical colleges that offer good quality medical and para-medical education.

A forum or mechanism for regular interaction will be set up at state, regional and district level. Involvement and participation of professional bodies and associations like the IMA, OMSA, state Medical Council, medical college faculty / OCHA / OVHA / CMAI / other networks will be ensured.

- i. A CME unit will be set up to organize regular programmes especially for private practitioners, in collaboration with existing professional associations.
- ii. Referral and back-referral mechanisms between public and private health systems will be established and streamlined.
- iii. Linkages with the private, unorganized sector such as the Registered Medical Practitioners (RMPs) and local healers will be initiated on a pilot basis at PHC, tehsil or district level. Their knowledge and skill upgradation will be supported through training. They can participate in some components of national health programmes if standard requirements are met. They will be advised when and where to refer patients.
- iv. Proper contracting out mechanisms will be developed for handing over selected health centres or services, drawing on lessons from earlier experiments in Orissa and elsewhere. They will incorporate conditions of operation, financial powers, administrative control of staff, reimbursement for services provided, drugs and equipment supply. A memorandum of understanding or an agreement for specified periods will be signed between the two parties.

2. Regulation and facilitation to ensure good quality services

The aim will be to regulate the functioning of the private medical institutions by enforcing existing legislation such as the Orissa Clinical Establishment Act (OCEA) and the Orissa Medical Registration Act (OMRA).

- i. Comprehensive district and state database will be developed with important information on private medical institutions e.g., infrastructure, personnel, and services provided. Categorization of private institutions will be done.
- ii. A target date will be set for completing registration of all current private medical institutions with a mechanism for ongoing registration, which is simple and quick.
- iii. District level mechanisms for inspection and licensing (under OCEA) of private medical institutions will be established, for initial registration and renewal.
- iv. Other appropriate accreditation / licensing / approval procedures will be made mandatory (e.g., for diagnostic laboratories).
- v. Regulatory authorities e.g., DMET, State Medical Council – will be strengthened and made more effective.

3. Information Sharing

A reporting mechanism with two-way information sharing will be set up.

- i. Participation of private health institutions and practitioners in the disease surveillance system of the state will be made mandatory (a recent MCI directive has stated this clearly).
- ii. Mechanisms at district level to collect and consolidate information on vital events, morbidity and mortality, communicable disease incidence from private health institutions will be set up.

4. Community Awareness and Advocacy

Involvement of NGOs and peoples organizations in awareness and advocacy has been very successful in many parts of the country. This will be tried in Orissa

- i. Proactive steps to be taken to identify and involve NGOs and civil society of groups on issues of public health importance.
- ii. Meetings and workshops will be held to plan and review these initiatives.

CHAPTER 8.3

INTEGRATING INDIAN SYSTEMS OF MEDICINE & HOMEOPATHY

A. Introduction

The Indian Systems of Medicine and Homeopathy have received relatively little policy attention and budgetary support during the past several decades. Their contribution to health and health care is being increasingly recognized nationally and globally. There will in future be greater efforts to develop ISM& H services with enhanced support.

B. Situation Analysis

In Orissa, Ayurveda as well as Homeopathic systems of treatment have received popular recognition among the masses, while Unani system is in its budding stage and Siddha system is yet to be introduced.

The existence of I.S.M. & H network of services in the state is as follows:

Table 1. ISM&H services in Orissa

Sl. No.	I.S.M. & H. Network	Ayurveda	Homeopathy	Unani
1.	No. of undergraduate medical colleges	6	6	-
2.	No. of post graduate medical colleges	1	1	-
3.	No. of hospitals	5	6	-
4.	No. of beds	203	175	-
5.	No. of dispensaries	519	460	9
6.	No. of Registered Medical Practitioners	4133	4885	13

C. Objectives

An integral feature of all the Indian Systems of Medicine and homeopathy is that they take a holistic view of human health and consider a human being in totality keeping in view his/her subtle relationship with the environment. These systems aim not just on curing diseases but also enabling the body to fight the disease while promoting positive health.

There is urgent need for a balanced and integrated development of these systems of medicine to enhance outreach and choice for the community in quality primary health care.

D. Strategies

1. Establish primary level health care services of ISM & H in all parts of the state in general, and in the health starved (tribal, hilly) areas in particular through improving the existing infrastructure

- i. Ayurvedic / homeopathic medical officers will to be posted in PHC (N) which are continuously going vacant due to non joining of allopathic doctors. They will be given orientation and in-service training, especially about National Health Programmes, management of PHCs, teamwork and referrals.
- ii. ISM & H dispensaries have been set up at present in 959 Gram Panchayats only out of 5259 Gram Panchayats of the state. These will be strengthened and steps taken to open dispensaries in other areas, to ensure that people throughout the state can access the outreach services of ISM & H.
- iii. Permanent buildings will to be provided along with electricity, water and toilet provisions to improve the working environment of the existing ISM & H dispensaries.

2. Provide specialized treatment at other levels of health care

- i. Ayurvedic / Homeopathic medical officers will be posted to attend patients in the outdoor department of district headquarter hospitals and block and subdivision hospitals.
- ii. District headquarter hospitals may allocate a few in-patient beds (ten) for Ayurvedic / Homeopathic systems of treatment. This will be introduced in a phased manner.

3. Identify diseases amenable for cure under ISM & H and promote referral for modern medicine interventions

- i. The diseases that can be easily cured/ controlled by ISM & H medicines will be identified and treatment guidelines prepared.
- ii. The public as well as the health providers of all the systems of treatment and will be informed about the scope and limitations of each therapy.
- iii. The doctors of all the systems will be advised to refer patients to other effective systems for which they have no satisfactory treatment. Cross-referral and communication systems will be established.
- iv. Research centres on ISM & H will be established in selected medical colleges to conduct research activities to further develop the potentialities of each system and to disseminate the results thereof to the ISM & H doctors. The ISM & H medical colleges will also be strengthened.

4. Strengthen ISM & H institutions to render more effective health care service to people

- i. Orientation training and regular continuing education will be organized for ISM & H doctors to update their knowledge.
- ii. There will be adequate supply of quality medicines to the ISM & H institutions.
- iii. There will be greater job opportunities, promotional avenues and better status in government sector in respect of ISM & H.
- iv. I.E.C. activities regarding ISM & H will be conducted to promote, propagate and popularize the systems among the public.
- v. Mobile ISM & H units will be run for better outreach services on a pilot basis.
- vi. Supervision and monitoring of ISM & H institutions and their services will be given greater attention. Patient feedback will be encouraged.

CHAPTER 8.4

STRENGTHENING MEDICAL TECHNOLOGY IN HEALTH CARE

A. Introduction

With increasing concern for delivering good quality, cost effective health care the public health system needs to continuously renew and update its technology and management framework through strengthening its own R & D set up, and absorb appropriate technical know-how from other sources.

Web-based health care and telemedicine has opened up a plethora of possibilities – from remote diagnosis, self-care and medical education to online prescription and information on drugs. The present public health system needs to use telemedicine services for quick transmission of medical information. Doctors can consult with the patient, see reports of diagnostic examinations and even give orders to hospitals online. This technique can help doctors in clinic management, preserving and retrieving patient's records and transmitting them via the web for further suggestions or even sending them to respective hospitals before a patient's admission. The e-health care models can save time, money and energy and enable doctors to keep more accurate medical records, which are accessible at all, times. Drugs prescribing patterns of doctors can be monitored

B. Situation Analysis

Technological upgradation and innovative shifts of the present public health system are necessary due to the current inadequate service coverage and access, unsatisfactory quality of care, and poor information and communication linkages within and between institutions and with the people.

In this regard, the scope for technological upgradation of pathology, bacteriology microbiology and biochemical laboratories of health institutions, especially at secondary and tertiary levels including medical college hospitals, needs to be explored. Advanced medical care for eye, ENT, heart, kidney, plastic surgery, nuclear medicine etc., needs to be introduced at selected institutions.

However, in the presence of vast disparities in access and quality of health care between the advantaged and disadvantaged, technological upgradation will be tackled with a sense of proportion, without further enhancing the disparities. Ethical issues of confidentiality and privacy will also need to be ensured with installation of appropriate safe guards.

C. Objectives

1. To provide timely, reliable, affordable and quality health especially to the poor and weaker segments with technology upgradation where relevant, ensuring community participation and control.

2. To introduce advanced relevant medical technology care, both diagnostic and curative, making disease management more scientific and accurate.
3. To enable doctors and health professionals to enrich and update their knowledge and skills through e-health services, leading to better health.
4. To enable people to take informed decisions in seeking medical care through better access to relevant information and knowledge.
5. To ensure increased productivity of health care resources, including health personnel and facilities.

D. Strategies

1. Institute a mechanism to assess and advise on introduction of new technology

A technical advisory cell will be established to guide, facilitate and monitor the upgradation of existing health care technology through continuous scanning, analysis, acquisition and adoption of advanced diagnostic and treatment systems, tools, equipment and know-how relevant to the priority health problems in the state. They will also commission social audits and community feedback.

2. Better diagnostic and treatment facilities at referral centres using new technology

- i) The Department will improve facilities, infrastructure and equipments for diagnostic investigation and treatment relating to radiology, pathology, biochemistry, microbiology, immunology, nuclear medicine, etc., in the apex hospitals which act as referral supports to primary and secondary health care in the state.
- ii) Technical collaboration will be established with reputed health institutions (public / private) and research centres for quality improvement of health care through adoption of appropriate modern technology, tools and equipment with reference to emergency medicine, surgery, neurology, ophthalmology, cardiology and other specialties.
- iii) Training will be imparted to select medical professionals regarding use of advanced methods and equipment for diagnostic investigation, treatment and surgical operations.
- iv) To explore the promotion of self-diagnostic equipment – glucometer, BP monitor, thermometer, heart-rate monitor and other similar items, for cost effective disease management and care at community level whenever feasible.

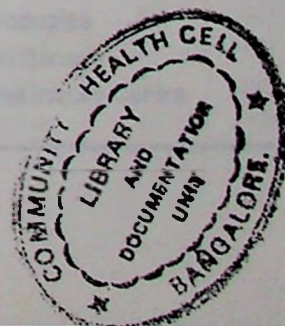
3. Introduction of Information and Communication Technology (ICT) and its management

- i) ICT infrastructure, connectivity, and its maintenance and management systems will be introduced at different levels of the health care system in a systematic, phased manner.
- ii) An online medical network will be developed for electronic transmission of medical information utilizing high speed ISDN telephone lines and a range of portable equipment for online storage, processing and transmission of clinical data, medical test reports, images and pictures, enabling medical professionals to hold live discussion and tele-consultations.
- iii) Tele education programmes will be conducted for undergraduate and postgraduate health professional teaching and for in-service training relating to different specialties – pathology, radiology, microbiology, experimental surgery, neurosurgery, urology, etc. Linkages will be established with other national efforts.
- iv) E-health care web based models will be developed and used to standardize communication among doctors, hospitals, pathological laboratories, pharmacies and patients to build an online medical community. Doctors will be trained to use the online medical network for exchanging ideas, experience and information.
- v) The health inter-network will be used to make research findings available to health providers in the periphery, especially on topics of public health importance. A community participation model will be tried out.

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3. Introduction of Information and Communication Technology (ICT) and its
 measurement

- i) ICT infrastructure development: This will be measured in terms of the number of computers and networked systems available in the health sector.
- ii) An online medical records system will be developed for electronic transmission of medical information utilizing high speed ISDN telephone lines and a range of personal computers for data storage, processing and transmission of data. This will be used to report trends and patterns in health status and to provide a basis for decision making and the development of health policy.
- iii) Health information systems will be developed for health status, disease and health services. These systems will be used to monitor health status and to provide a basis for decision making and the development of health policy. The systems will be developed in a modular fashion, allowing for the addition of new modules as required.
- iv) Health care and health services will be described and used to monitor health status and health services. The systems will be developed in a modular fashion, allowing for the addition of new modules as required.
- v) The health information system will be used to monitor health status and health services. The systems will be developed in a modular fashion, allowing for the addition of new modules as required.



ERRATA

PAGE NO.	LINE NO.	READ	INSTEAD OF.
1.	37	Strengthen	Strengthening
3.	20	the handing over of cleaning	the handing over cleaning services
4.	17	This has been changed	This is changed
5.	37	State health manpower	State health manpower
7.	30	approach to providing mobility support	approach to provider mobility- support
13.	40	female foeticide	female feticide
16.	35	provide strategic advice to	provide strategic advise to
18.	10	Board	Boards
22.	34	understanding of these diseases	understanding of these disease
22.	20	malaria, diarrhoea	malaria, diarrhea
23.	32	especially for children	especially for of children
26.	BOX 5	50% on account	50% of on account
26.	BOX 7	IMR to 50/1000	IMR to 45/1000
27.	8	involvement of Panchayat Raj	involvement f Panchayati Raj
30.	17	PHCs are somewhat	PHC: is somewhat
33.	17	for the poor	for the poo
34.	20	PHCs into CHCs	PHCs int CHCs.
38.	33	informed individuals	informed individual
45.	45	streamlined according to the recent drug policy	streamlined the recent drug policy
46.	7	microscopes	chloroscopes
49.	8	quantity of anti-malarial drugs	quantity of antimalaria drugs
49.	17	focal spray	focal spay
49.	21	blood slides	blood slide
49.	22	vacancies exist	vacancies exists
52.	4	structure and / or function	structure and or function
52.	9	close to peoples' homes	close to peoples homes
52.	18	chemicals have made	chemicals has made
52.	22	stomach, colon	stomach colon
52.	38	regardless of	regardless
54.	6	Chewed form	chewed from
58.	25	orientation training	empowerment training
60.	24	visited at least twice	visited at least once.
61.	15	Advice on diet and adequate rest in pregnancy	Promote weight gain of pregnant women
65.	7	an indicator	an indictor
66.	4	are reported	is reported
68.	24	indicators of achievement	indicators if achievement
68.	6	Many women	Many women couples
72.	27	Data based on Census	Date based on Census
74.	35	Regional Spinal Injury Centre	Regional Spinal Inquiry Centre

ERRATA

PAGE NO.	LINE NO.	READ	INSTEAD OF.
83.	14	Changed Internship training programme	Changed Internship training programme
83.	19	mandatory pre - PG	mandatory pre PG
83.	22	Orlssa Health Sector Reform Initiative	Orissa Health Sector Strategy Initiative
86.	Box 2	including	includin
86.	Box 2	end beneficiary	en beneficiary
90.	8	behavioural sciences, information technology	behavioural sciences information technology
90.	18	medical colleges and associated teaching hospitals	medical colleges and associate teaching hospitals
91.	27	nutrition, health education	nutrition, health promotion
91.	34	siddha	sidda
92.	20	old records, integration of	old records, and integration of
92.	29	improve referral	improve of referral
96.	31	Directorate to develop	Directorate develop
96.	36	Course in nursling administration	course nursing administration
97.	12	special units in other specialized institutions	special units other specialized institutions
98.	32	intake and output	intake and production
99.	11	done after undertaking	done undertaking after
100.	9	super-structure	supra structure
101.	16	apathy and lack of sensitivity	apathy, lack of sensitivity
101.	24	participatory	participative
103.	4	participatory	participative
105.	41	Gajapati	Gujapati
107.	15	project and programme supervision and monitoring	project a programme supervision and monitory
108.	3	with regard to	with regards to
109.	34	user fee will not be charged	user fee will not be changed
112.	31	health spending	heath spending
114.	18	done in time	done in time wherever
114.	26	risk pooling	ris pooling
114.	27	private expenditure	privat expenditure
118.	8	transparent	transparen
119.	22	when there is change in personnel	when there is a charge in personnel
121.	31	minor repairs	mino repairs
122.	20	periodic (annual) maintenance	period (annual) maintenance.
130.	16	exclusively for the	exclusively or the
133.	14	as well as prolonged	as well as and prolonged
135.	19	plans for	plans fo
138.	14	brought to bear in an emergency	brought be bear in an emergency.
141.	34	Panchayat level and vice versa	Panchayat level and vise versa.
145.	31	civil society groups	civil society of groups
150.	16	using new technology	using ne technology

