District Health Society

Buxar

District Health Action Plan

2009-2010

Developed & Designed

By

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Foreword

Recognizing the importance of Health in the process of economic and social development and improving the quality of life of our citizens, the Government of India has resolved to launch the National Rural Health Mission to carry out necessary architectural correction in the basic health care delivery system.

This District Health Action Plan (DHAP) is one of the key instruments to achieve NRHM goals. This plan is based on health needs of the district.

After a thorough situation analysis of district health scenario this document has been prepared. In the plan, it is addressing health care needs of rural poor especially women and children, the teams have analyzed the coverage of poor women and children with preventive and promotive interventions, barriers in access to health care and spread of human resources catering health needs in the district. The focus has also been given on current availability of health care infrastructure in public/NGO/private sector, availability of wide range of providers. This DHAP has been evolved through a participatory and consultative process, wherein community and other stakeholders have participated and ascertained their specific health needs in villages, problems in accessing health services, especially poor women and children at local level.

The goals of the Mission are to improve the availability of and access to quality health care by people, especially for those residing in rural areas, the poor, women and children.

I need to congratulate the department of Health and Family Welfare and State Health Society of Bihar for their dynamic leadership of the health sector reform programme and we look forward to a rigorous and analytic documentation of their experiences so that we can learn from them and replicate successful strategies. I also appreciate their decision to invite consultants (NHSRC/ PHRN) to facilitate our DHS regarding preparation the DHAP. The proposed location of HSCs, PHCs and its service area reorganized with the consent of ANM, AWW, male health worker and participation of community has finalized in the block level meeting.

I am sure that this excellent report will galvanize the leaders and administrators of the primary health care system in the district, enabling them to go into details of implementation based on lessons drawn from this study.

Ajay Yadav, IAS

(DM, Buxar)

About the Profile

Under the National Rural Health Mission this District Health Action Plan of Buxar district has been prepared. From this, situational analysis the study proceeds to make recommendations towards a policy on workforce management, with emphasis on organizational, motivational and capability building aspects. It recommends on how existing resources of manpower and materials can be optimally utilized and critical gaps identified and addressed. It looks at how the facilities at different levels can be structured and reorganized.

The information related to data and others used in this action plan is authentic and correct according to my knowledge as this has been provided by the concerned medical officers of every block. I am grateful to the state level consultants (NHSRC/PHRN), Pragramme Officers, MOICs, Block Health Managers and ANMs and AWWs from their excellent effort we may be able to make this District Health Action Plan of Buxar District.

I hope that this District Health Action Plan will fulfill the intended purpose.

Dr. A.K. Aman
ACMO, Buxar

Dr. R. C. Prasad
Civil Surgeon, Buxar

ABBREVIATIONS

AFHS	Adolescent Friendly Health Services
ANM	Auxiliary Nurse Midwife
AWW	Anganwadi Worker
BCC	Behavior Change Communication
BEmOC	Basic Emergency Obstetric Care
BL	Budget Line
BPL	Below Poverty Line
CEmOC	Comprehensive Obstetric Care
CHC	Community Health Centre
DH	District Hospital
FHS	Female Health Supervisor
FHW	Female Health Worker
FNGO	Field Non Government Organization
FP	Family Planning
FRU	First Referral Unit
GOI	Government of India
ICDS	Integrated Child Development Scheme
IDSP	Integrated Disease Surveillance Project
IFA	Iron Folic Acid
IIPS	Indian Institute of Population Studies
IMNCI	Integrated Management of Neonatal and Childhood Illness
IMR	Infant Mortality Rate
IPHS	Indian Public Health Standard
ISM	Indigenous System of Medicine
MMU	Mobile Health Unit
MMR	Maternal Mortality Rate
MNGO	Mother Non Government Organization
MO	Medical Officer
MTP	Medical Terminate of Pregnancy
NGO	Non- Government Organization
NLEP	National Leprosy Eradication Programme
NMR	Neonatal Mortality Rate
NNC	Neo Natal Care
NVBDCP	National Vector Born Disease Control Program
PIP	Program Implementation Plan
PPP	Public Private Partnership
QA	Quality Assurance
RCH	Reproductive and Child Health
RMT	Regional Monitoring Team
RNTCP	Revised National Tuberculosis Control Program
RTI	Reproductive Tract Infection
SBA	Skilled Birth Attendants
STI	Sexual Transmitted Illness
TBA	Trained Birth Attendant
TFR	Total Fertility Rates
TT	Tetanus Toxide

Executive Summary

The NRHM seeks to provide accessible, affordable and quality health care to the rural population, especially the vulnerable sections. It also seeks to reduce the Maternal Mortality Rate (MMR) in the country from 407 to 100 per 1,00,000 live births, Infant Mortality Rate (IMR) from 60 to 30 per 1000 live births and the Total Fertility Rate (TFR) from 3.0 to 2.1 within the 7 year period of the Mission.

The Plan of Action includes increasing public expenditure on health, reducing regional imbalance in health infrastructure, pooling resources, integration of organizational structures, optimization of health manpower decentralization and district management of health programmes, community participation and ownership of assets, induction of management and financial personnel into district health system, and operationalizing community health centers into functional hospitals meeting Indian Public Health Standards in each Block of the Country.

In baseline surveys, key information required for planning of various health activities are collected. The information collected provides a picture of the local situation and determines the appropriate strategy for programme development and implementation. The method of data collection is both primary as well as secondary. The secondary data were collected by reviewing records, registers, and annual reports. For primary data; the procedure involved; focus group discussions, personnel interviews, and meetings. These were held at various stages to have opinion from all the programme officers, health staff, NGOs, and grass root workers. The entire planning revolves around participatory planning. Planning involve all the programmes i.e. NRHM, RCH, NVBDCP, NLEP, NBCP, IDSP, and RNTCP. The budget lines and work activities for different programmes are separately discussed.

Under NRHM special focus is given to mobile units, urban health, formation of village health and sanitation committee, infrastructure development, and most importantly selection and training. Reproductive and child health is another important area involving maternal health, child health, immunization, adolescent

health, RTI/STI management, and family planning. In order to increase institutional delivery attention has been given to 24x7 PHCs. For management of malnutrition support to GMIS project is included in the plan. "National programme for Control of Blindness, include innovative approach for cataract management through formation of cataract identifying team. This team constitutes of multipurpose health worker, religious leaders of the village, link person, community based volunteers, ASHA, ophthalmic assistant, and supporting staff. School eye examination is also strengthened for managing refractive errors.

The goal of NLEP phase-2 was to eliminate leprosy by March-2005 by reducing the prevalence rate of leprosy to below 1 per 10,000 populations. Tackling urban leprosy is also an important component. The activities include training, EDPT, case validation, RFT, deformity care and rehabilitation. The Revised National Tuberculosis Control Programme (RNTCP) aims to stop the spread of TB by curing patients. The major activities include technical, institutional strengthening, IEC, training, quality assurance, and research and surveys to accomplish the set Objectives. To expand the horizons of NAMP operational activities the various vector borne diseases like Dengue, Filariasis, Japanese Encephalitis, Chikungyuniea, Kala azar etc, have been incorporated and subsequently the name of the programme changed to National Vector Borne Disease Control Programme (NVBDCP). Under the plan the activities include EDPT, selective vector control, IMNP, biological control, management information system, and human resource development.

To have effective surveillance system, IDSP was introduced. The planning of IDSP include case detection and recording, compiling the weekly reports, report transmission, analysis and interpretation, taking appropriate action, investigation and confirmation of suspected cases and outbreaks if any, providing feedback and dissemination of results, and evaluation leading to improvement in the system.

For all the endeavors the district will follow ***"Triple A Approach"-*** Assess the problem, Analyze its causes, and Take Action.

SECTION - I
Objective And Strategies Of the Mission

INTRODUCTION

The National Rural Health Mission (NRHM) has been launched with a view to bringing about dramatic improvement in the health system and the health status of the people, especially those who live in the rural areas of the country. The Mission seeks to provide universal access to equitable, affordable and quality health care which is accountable at the same time responsive to the needs of the people, reduction of child and maternal deaths as well as population stabilization, gender and demographic balance. In this process, the Mission would help achieve goals set under the National Health Policy and the Millennium Development Goals. To achieve these goals NRHM will:

- Facilitate increased access and utilization of quality health services by all.
- Forge a partnership between the Central, state and the local governments.
- Set up a platform for involving the Panchayati Raj institutions and community in the management of primary health programmes and infrastructure.
- Provide an opportunity for promoting equity and social justice.
- Establish a mechanism to provide flexibility to the states and the community to promote local initiatives.
- Develop a framework for promoting inter-sectoral convergence for primitive and preventive health care.

THE OBJECTIVES OF THE MISSION

- Reduction in child and maternal mortality
- Universal access to public services for food and nutrition, sanitation and hygiene and universal access to public health care services with emphasis on services addressing women's and children's health and universal immunization
- Prevention and control of communicable and non-communicable diseases,
- Including locally endemic diseases.
- Access to integrated comprehensive primary health care.
- Population stabilization, gender and demographic balance.
- Revitalize local health traditions & mainstream AYUSH.
- Promotion of healthy life styles.

The expected outcomes from the Mission as reflected in statistical data are:

- IMR reduced to 30/1000 live births by 2012.
- Maternal Mortality reduced to 100/100,000 live births by 2012.

- TFR reduced to 2.1 by 2012.
- Malaria Mortality Reduction Rate - 50% up to 2010, additional 10% by 2012.
- Kala Azar Mortality Reduction Rate - 100% by 2010 and sustaining elimination until 2012.
- Dengue Mortality Reduction Rate - 50% by 2010 and sustaining at that level until 2012.
- Filaria / Microfilaria Reduction Rate - 70% by 2010, 80% by 2012 and
- elimination by 2015.
- Cataract operations-increasing to 46 lakhs until 2012.
- Leprosy Prevalence Rate –reduce from 1.8/10,000 in 2005 to less than 1 per 10,000 thereafter.
- Tuberculosis DOTS series - maintain 85% cure rate through entire Mission Period and also sustain planned case detection rate.
- Upgrading all Community Health Centers to Indian Public Health
- Standards.
- Increase utilization of First Referral units from bed occupancy by referred
- cases of less than 20% to over 75%.
- Engaging 4,00,000 female Accredited Social Health Activists (ASHAs).

The expected outcomes at Community level:

- Availability of trained community level worker at village level, with a drug kit for generic ailments.
- Health Day at Aanganwadi level on a fixed day/month for provision of
- immunization, ante/post natal check ups and services related to mother and child health care, including nutrition.
- Availability of generic drugs for common ailments at sub Centre and Hospital level.
- Access to good hospital care through assured availability of doctors, drugs and quality services at PHC/CHC level and assured referral-transport-communication systems to reach these facilities in time.
- Improved access to universal immunization through induction of Auto Disabled Syringes, alternate vaccine delivery and improved mobilization
  services under the programme.
- Improved facilities for institutional deliveries through provision of referral
  transport, escort and improved hospital care subsidized under the Janani Surakshya Yojana (JSY) for the below poverty line families.
- Availability of assured health care at reduced financial risk through pilots of Community Health Insurance under the Mission.
- Availability of safe drinking water.

- Provision of household toilets.
- Improved outreach services to medically under-served remote areas through mobile medical units.
- Increase awareness about preventive health including nutrition.

The core strategies of the Mission:

- Train and enhance capacity of Panchayati Raj Institutions (PRIs) to own, control and manage public health services.
- Promote access to improved healthcare at household level through the female health activist (ASHA).
- Health Plan for each village through Village Health Committee of the Panchayat.
- Strengthening sub-centre through better human resource development, clear quality standards, better community support and an untied fund to enable local planning and action and more Multi Purpose Workers (MPWs).
- Strengthening existing (PHCs) through better staffing and human resource development policy, clear quality standards, better community support and an untied fund to enable the local management committee to achieve these standards.
- Provision of 30-50 bedded CHC per lakh population for improved curative care to a normative standard. (IPHS defining personnel, equipment and management standards, its decentralized administration by a hospital management committee and the provision of adequate funds and powers to enable these committees to reach desired levels)
- Preparation and implementation of an inter sector District Health Action
- Plan prepared by the District Health Mission, including drinking water,
- sanitation, hygiene and nutrition.

Role of the District Health Mission :-

- Responsible for planning implementing, monitoring and evaluating progress of mission.
- Preparation of annual and perspective plan for the district.
- Suggesting district specific interventions.
- Carrying out survey of non-governmental providers to see what contribution they can make.
- Partnership with NGOs, Panchayats for effective action.
- Strengthening training institutions for ANMs/ Nurses etc.
- Provide leadership to Village Gram Panchayat, Cluster and block level teams.
- Establish Resource Group for professional also can facilitate implementation of CORE strategies of the mission.
- Experiment with risk pooling for hospitalization.

- Ensure referral chain and timely disbursement of all claims.
- Arrange for technical support to the blocks teams and for itself.
- Arrange for epidemiological studies and operational research to guide district level planning.
- Nurture community processes.
- Transparent system of procurement and accountability.
- Activate women's groups; adolescent girl's for to ensure gender sensitive approach.
- Provide _data analysis and compilation facility in order to meet regular MIS needs.
- Carry out Health Facility and supervision of household surveys.
- District Health Mission to ensure that district annual action plans as per RNTCP requirement would continue to be submitted by the district to the state TB cell.

The priorities, the constraints, and action to overcome them:

The table given below brings out an analysis of the priorities, constraints in achieving progress in those priority areas and the action needed to overcome those constraints: -

Priorities	Constraints	Action to overcome constraints
Functional facilities - Establishing fully functional Sub Health Centers / PHCs/ CHCs/Sub Divisional/District Hospitals.	Dilapidated or absent physical infrastructure • Non-availability of doctors /paramedics • Drugs/ vaccines shortages • Dysfunctional equipments • Untimely procurements • Chocked fund flows • Lack of accountability • framework • Inflexible financial • resources. • No minimum mandatory service provision standards for every facility in place which makes full use of available human and	• Infrastructure/ equipments • Management support • Streamlined fund flows • Contractual appointment and support for capacity • development • Pooling of staff/optimal • utilization • Improved MIS • Streamlined procurement • Local level flexibility • Community /PRI/RKS for accountability / M&E • Adopt standard treatment guidelines for each facility and different levels of Staffing, and develop road maps to reach

	physical resources and no road map to how desirable levels can be achieved	desirable levels in a five to seven year period.
Increasing and improving human resources in rural areas	• Non-availability of doctors • Non-availability of • paramedics • Shortage of ANMs /MPWs. • Large jurisdiction and poor monitoring. • No accountability • Lack of any plan for career advancement or for • Systematic skill upgradation. • No system of appraisal with incentives / disincentives for good / poor performance and Governance related problems.	• Local preference • Contractual appointment to a • facility for filling short term gaps. • Management of facilities including personnel by PRI Committees. • Train and develop local residents of remote areas with appropriate cadre • Structure and incentives. • Multi-skilling of doctors /paramedics and continuous skill upgradation • Convergence with AYUSH • Involvement of RMPs. • Partnership with non-State Stakeholders.
Accountable health delivery	• Panchayati Raj Institutions /user groups have little say in health system • No village / hamlet level unit of delivery • No resources for flexible community action	• Referral chain from hamlet to hospital • Control and management of Health facilities by PRIs • Budget to be managed by the PRI/User Group • PRI/User Group mandate for action • Untied funds and Household surveys
Empowerment for Effective decentralization And Flexibility for Local action	• Only tied funds • Local initiatives have no role • Centralized management and schematic	• Untied funds at all levels including local levels with flexibility for innovation. • Increasing Autonomy to SHC/PHC/ CHC/Taluk/ District Hospital along with

	inflexibility • Lack of mandated functions of PRIs / User Groups • Lack of financial and human resources for local action • Lack of indicators and local health status assessments that can contribute to local Planning. • Poor capability to design and plan programmes.	well monitored quality controls and matched fund flows. • Hospital Management Committees • Evolving diverse appropriate PRI / User framework • PRI/User group action at Village / GP / Block and District level
Reducing maternal and child deaths and population stabilization	• Lack of 24X7 facilities for safe deliveries. • Lack of facilities with for emergency obstetric care. • Unsatisfactory access and utilization of skilled assistance at birth • Lack of equity/ sensitivity in family welfare services/ counseling. • Non-availability of Specialists for anesthesia, obstetric care, pediatrics care, etc. • No system of new born care with adequate referral support. • Lack of referral transport systems. • Need for universalization of ICDS services and universal access to good quality antenatal care.	• Functional public health system including CHCs as FRUs, PHC-24X7, SHCs, Taluk/District Hospital • Trained ANM locally recruited • Institutional delivery • Quality services at facility • Expanding facilities capable of providing contraception including quality sterilization services on a regular basis so as to meet existing demand and unmet needs. • Thrust on Skilled Birth Attendants/ local appointment and training • Training of ASHA • New born care for reducing neo natal mortality; • Active Village Health and Sanitation Committee; • Training of Panchayat members.

	• Need for linkage with parallel improvement efforts in social and gender equity dimensions. • Lack of linkages with other dimensions of women's health and women friendliness of public health facilities.	• Expanding the ANM work force especially in remote areas and in larger village and semi-urban areas. • Planned synergy of ANM, AWW, ASHA work force and where available with local SHGs and women's committees. • Linkage of all above to the Panchayat committee on health.
Action for preventive and promotive health	• Poor emphasis on locally and culturally appropriate health communication efforts. • No community action & household surveys • No action on promoting healthy lifestyles whether it be fighting alcoholism or promoting tobacco control or promoting positive actions like sports/yoga etc. • Weak school health programmes • Absence of Health Counseling/ early detection. • Compartmentalized IEC of every scheme	• Untied funds for local action • Convergence with other departments/institutions • IEC Training and capability building • Working together with ICDS/TSC/ CRSP/SSA/ MDM • Improved School Health Programmes • Common approach to IEC for health • Involvement of PRIs in health. • Oral hygiene movement.
Disease Surveillance	• Vertical programmes for communicable diseases • No integrated / coordinated action for disease surveillance at various levels in place yet. • No periodic data collection and analysis	• Horizontal integration of programmes through VH & SC, SHC, PHC, CHC. • Initiation and Integration of IDSP at all levels. • Building district / sub district level epidemiological capabilities.

	and no district and block specific epidemiological data available.	
Forging hamlet to hospital linkage for curative services	• Entitlements of households not defined • No community worker • No well defined functional referral / transport/ communication system. • No institutionalized feedback mechanism to referring ASHA/ peripheral health facility in place.	• ASHA/AWW/ANM • Household / facility surveys/survey of non – governmental providers for entitlements. • Linkages with SHC / PHC/ CHC for referral services
Health Information System.	• Absence of a Health Information System facilitating smooth flow of information. • Not possible to make informed choices	• A fully functional two way communication system leading to effective decision making. • Publication of State and District Public Reports on Health.
Planning and monitoring with community ownership	No local planning, no household surveys, no Village Health Registers. Lack of involvement of local community, PRI, RKS, NGOs in monitoring of public health institutions like SHC/ PHC/ CHC/ Taluka / District Hospitals.	Habitation/village based household surveys and Facility Surveys as the basis for local action. Untied resources for planning and monitoring. Management of health facilities by the PRIs. Thrust on community monitoring, NGO involvement, PRI action, etc. Ensure Equity & Health. Promote education of women SC/ST & other vulnerable groups.
Work towards women Empowerment and	Standard package of interventions under	Facility and household services to generate useful

Securing entitlements of SCs /STs /OBCs /Minorities	current schemes. Coverage and quality of services to women, SCs/STs/OBCs/ Minorities not tracked health institution wise. No analysis of access to services and its quality.	data for disaggregated monitoring of services to special categories. NGO and research institution involvement in Facility surveys to ensure focus on quality services for the poor. Visits by ASHAs. Outreach services by Mobile Clinics.
Convergence of programme for combating/preventing HIV / AIDS, chronic diseases, malnutrition, providing safe drinking water etc. with comm. Support.	• Vertical implementation of programme. • Only curative care. • Inadequate service delivery. • Non-involvement of community.	• Convergence of programmes. • Preventive care. • Health & Education • Empowering Communities. • Providing functional health facility [SHC], PHC [CHC] for effective intervention.
Chronic disease burden.	• Double disease burden. • Lack of stress on preventive health. • Lack of integration of programmes with main health programmes. • No IEC/advocacy. • Inadequate Policy interventions.	• Village to National level integration. • Stress on preventive Health • IEC/Advocacy • Help of NGOs • Policy measures.
Social security to poor to cover for ill health linked impoverishment and bankruptcy.	Large out of pocket expenditures even while attending free public health facilities- food transport, escort livelihood loss etc. Economically atastrophic illness events like accidents, surgeries need coverage for everyone especially the poor,	• Innovations for risk pooling mechanisms that either cross subsidies the poor or are forms of more efficient demand side financing so that the economic burden of disease on the poor decreases. • Guaranteeing hospitalization at functional facilities

Planning, Monitoring and Evaluation processes:

Planning, Monitoring and Evaluation of health services program is carried out at the district/PHC/SC level. A check list is prepared. The items can be responded through interview, document review and observation of processes at three levels.

At district level annual plans prepared by group discussion with MOPHC at meeting and District Program Management Unit. Plans are implemented very well at field level. There is a district plan made for resources. Programs are monitored by different category of supervisory staff through field visits, records and registers, check-list, observations. Feed back given by subordinates is satisfactory and corrective measures taken for future action. Program evaluation is done by central/state government through NFHS, SRS and ORG. This NRHM action plan is the compilation of the planned activities to be carried out at all level of care. The activities for a year is divided into four quarters and distributed accordingly. This plan is based on the past performance of the district. The records were used as a source of secondary
data.

There are 11 blocks in the district and from each block 2 villages were chosen for conducting focused group discussions.

The Vision 2010 document aimed to lower both infant and maternal mortality to less than one third of the prevailing levels and stabilize population by reducing TFR from 2.8 to 2.1 by 2010. The RCH program launched in the district in 1997-2004 provided impetus for achieving policy goals as reflected in the Vision 2010 document.

In accordance with India's National Population Policy, Buxar's population policy also focuses on improving the quality of life of the people, reducing gender discrimination, empowering women, and ensuring extensive service support to achieve replacement level fertility <2 by 2010. Respecting the reproductive rights of men and women is an underlying principle of Buxar's Population Policy. Achievement of this goal calls for 100% access to quality and affordable reproductive health services, including family planning and sexual health services, and significant reduction in infants and maternal mortality. Women's education remains an important objective not only because it is closely associated with lower infant mortality and lower fertility, but for its own sake. Universal access to primary education particularly, for girls, and closing of the "gender gap" in education receives priority. Specific measures are being undertaken to achieve gender equity and equality, and to empower women. The latter requires strong support from men, and their participation in women's empowerment. Women's health and women's education is being encouraged. The proposed RCH-II program is in conformity with an integrated approach to the program, aimed at improving the health status of women and children.

SECTION – II

Introduction And Demographic Indicator of the District

Buxar district has close linkage with that of its parent district Bhojpur and has an old and an interesting history.

Buxar is famous since the epic period for being the seats of eminent saints, battlefield of Gods and Demons as per Puranas and a combat zone between foreign invasion and countrymen in modern history. The remains from archaeological excavations have established the link of Buxar with ancient civilisations of Mohanjodaro and Harappa. This place was also known as "Siddhashram", "Vedgarbhapuri", "Karush", "Tapovan", "Chaitrath", "VyaghraSar", "Buxar" in ancient history. The History of Buxar dates back even prior to the period of Ramayana. The word Buxar is said to have been derived from VyaghraSar. The tiger face of Rishi Vedshira, an outcome of the curse of the sage Rishi Durvasha, was restored after bathing in a holy tank which was later named as VyaghraSar.

According to mythology, sage Vishwamitra the family guru of Lord Rama and eighty thousand saints had their sacred ashram at the banks of holy river Ganges that reside inside the modern District Buxar. He was disturbed in the yagna (sacrificial offering) by the demons. The place where due killing of the famous Rakshasi (demoness) Tadika by Lord Rama, is said to fall within the present Buxar town area. Besides, Lord Rama and his younger brother Laxman took their teachings at Buxar. It is also said that Ahilya, the wife of Gautam Rishi restored her human body from that of stone and got salvation by a mere touch of the feet of Lord Rama. This place is presently known as Ahirauli and is situated six kilometers away from the Buxar town. The Kanwaldah Pokhara also known as VyaghraSar is a tourist spot now a days.

Ancient Significance of Buxar is mentioned in ancient epics like Brahamana Purana and Varah Purana:

During the Mughal period, the historic battle between Humayun and Sher Shah was fought at Chousa in 1539 A.D. The British forces under Sir Heoter Munro defeated the Muslim army of Mir Qasim, Shuja-ud-Daulah and Shah Alam-II on 23rd June 1764 on the grounds of Katkauli situated at about 6 kilometers from Buxar town. The stone memorial erected by Britishers at Katkauli bears testament to the fight even today.

Buxar district is an administrative district in the state of Bihar in India. The district headquarters are located at Buxar. The district occupies an area of 1624 km² and has a population of 1,403,462 (as of 2001).

The town Buxar is located on the bank of river Ganges (Ganga). A road bridge over Ganges connects Buxar with Ballia District of neighboring state Uttar Pradesh. The town is connected to the state capital Patna by rail and road routes. Substantial proportion of trade activities are with well connected towns and cities in Uttar Pradesh such as Varanasi, Ballia and Ghazipur.

Main economic activity of the district is agriculture and related trade. Rice and wheat are main crops. Sugarcane production, once prominent, has come down since closure of the local sugar factory.

History

Battle of Buxar: Mir Kasim (reign : 1760 to 1763), attempted to recover Bengal from the hands of British. In 1764, he enlisted the help of Mughal Emperor Shah Alam II and Nawab Shuja Ud Daulah of Oudh (Awadh). On October 23, 1764, Mir Kasim with his army was defeated by the British Major Hector Monro who led a contingent of 857 European soldiers and 6,213 sepoys. This victory paved the way for British Empire in India.

Religious Importance of Buxar

Buxar is a very important place for Hindus. Rishi Vishwamitra conducted his yagya here and brought lord Ram in his childhood from Ayodhya to protect his yagya from the evils of rakshasha, which he did by killing a lady evil named Tarkasur. Her deity is now installed and people usually go to see that. Lord Ram also released Ahilya by touching her through his foot and Ahilya lying in the form of stone converted into the human. Some one kilometer away from the city of Buxar the village at the bank of holy river Ganga AHIROULI is still there which has a small temple of Ahilya. The name Ahirouli of the village seems to be converted from ahilyavali(abode of ahilya). Degree college of Buxar is named on Rishi Vishwamitra established by famous saint late Shri Khaki Baba. This is the place from where lord Ram started his journey to attend the **Swayamwar** of Devi Sita, daughter of king Janak at Janakpuri in north Bihar, Mithila and married Devi Sita under the noble guidance of rishi Vishwamitra even without the knowledge of his father king Dasarath of Ayodhya. Many people once in a year take round of this religious area called **Panchkosi Parikrama**. They perform it in five days by halting in night in five villages surrounding Buxar. During this visit they cook their own food called **Litti-Bhanta**. This recipe is famous in Bihar, especially in the Bhojpuri speaking area. Dried dung cakes are used to prepare this recipe as fuel. It is easily available in whole of the area. Litti is ball like structure made of wheat flour by filling the black gram roasted powder mixed with salt and spices called Sattu. Bhanta (Round Brinjal) roasted in the fire of dung along with potato and tomato. Finally, all are mashed after removing its peel and taken with litti which is also roasted in the same fire. It's very delicious and famous recipe of bhojpuri speaking area. About ten kilometers east to the Buxar City on the Patna main road is the village Bhojpur. A broken and neglected fort of king Bhoj is still there. Perhaps, this is the place which originated the Bhojpuri language. It is said that the lamp light put on the top of this fort was visible in Delhi in night and some mughal emperor did not like the height of such fort and finally he smashed it. Although, this place is Historically very important, needs research to authenticate the references.

Geography

Buxar is located at coor d|25.34|N|83.58|E|[1]. It has an average elevation of 56 meters (183 feet).

Following are the Government health facilities available in district :

Sl. No.	Health Facility	Nos.
01	District Hospital	01
02	Sub Divisional Hospital	02
03	CHCs	00
04	PHCs	11
05	APHCs	15 + 27
06	Sub Centres	161 + 109
07	Mobile Medical Unit	01
08	Animal Husbandry	01
09	Ayurvedic Hospital	01

Current Staff Position in the District :-

cDlj ftykUrxZr rrh; ,oa prFkk J.kh dh deZpkfj;ksa dh v/kru fLFkfr %&

d0l0	lnuke	Lohdr in	dk;jr	fjfDr	vfHk;fDr
1	xM ,ul	2	2	0	
2	p{k lgk;d	2	2	0	
3	LoPNrk fufj{kd	11	0	11	
4	L0kkLF; if'k{kd	11	9	2	
5	i;kx'kkyk ikof/kd	26	5	21	
6	,Dl j VfDfuf'k;u	1	0	1	
7	efgyk LokLF; ifjn'kd	19	8	11	
8	QkekfllV	27	12	15	
9	'kY; xg lgk;d	1	0	1	
10	LokLF; dk;drk	23	1	22	
11	c0LokLF; dk;drk	23	10	13	
12	,0,u0,e0	217	212	5	
13	i[k.M ilkj if'k{kd	7	0	7	
14	lx.kd	7	5	2	
15	ifjokj dY;k.k dk;dRrk	21	11	10	
16	Pkyd	13	7	6	
17	Fyfid	43	36	7	
18	i/kku fyfid	2	2	0	
19	jkdMiky	2	2	0	
20	LVuk ¼vk'kfyfid½	3	1	2	
21	vfpfdRlk lgk;d	21	10	11	

22	fpfdRlk lekt loh	4	3	1	
23	Lok0 ifjn'kd ¼Vh0ch0½	4	2	2	
24	ch0lh0th0ny uk;d	1	1	0	
25	ch0lh0th0 ikof/kdh	6	6	0	
26	fMLiUlj	1	1	0	
	dy ;kx	498	348	150	
prFk oxh; depkfj;k dh v/kru fLFkfr %&					
1	ifj/kkid	27	3	24	
2	d{k lod	33	21	12	
3	>kMd'k	40	20	20	
4	vkn'kiky	10	10	0	
5	jkf= igjh	1	1	0	
6	Dd	1	1	0	
7	dd ljoUV	1	1	0	
8	Ekyh	1	0	1	
9	prFk oxh; deh ¼Vh0ch0lUVj½	4	4	0	
10	Lok0 lod	33	19	14	
	dy ;kx	151	80	71	

cDlj fty e fpfdRldk dh lnj vLirky@vu0vLi0@jQjy vLi0@ik0Lok0dUn@vfr0ik0Lok0dUnk e Lohdr] dk;jr ,o fjfDr dh v/kru fLFkfr

d0l0	lLFkku dk uke	Lohdr in	dk;jr	fjfDr	vfHk;fDr
1	lnj vLirky] cDlj	8	5	3	
2	ik0Lok0dUn] lnj i[k.M] cDlj	2	2	0	
3	ik0Lok0dUn] pklk	3	3	0	
4	ik0Lok0dUn] jktij	3	3	0	
5	ik0Lok0dUn] bVk<h	3	3	0	
6	ik0Lok0dUn] flejh	3	3	0	
7	ik0Lok0dUn] Mejko	3	3	0	
8	ik0Lok0dUn] ukokuxj	3	3	0	
9	ik0Lok0dUn] cãij	3	3	0	
10	ik0Lok0dUn] pkxkb	3	3	0	
11	ik0Lok0dUn] pDdh	3	1	2	
12	ik0Lok0dUn] dlB	3	1	2	
13	vfr0ik0Lok0dUn] egng	2	2	0	
14	vfr0ik0Lok0dUn] ljtk	2	1	1	

15	vfr0ik0Lok0dUn] ekfudij	2	0	2	
16	vfr0ik0Lok0dUn] eukgjij	2	0	2	
17	vfr0ik0Lok0dUn] fugkyij	2	1	1	
18	vfr0ik0Lok0dUn] nYygij	2	0	2	
19	vfr0ik0Lok0dUn] jktkij	2	1	1	ekOmPp U;k;ky; e ifr0
20	vfr0ik0Lok0dUn] cMdk flguijk	2	0	2	
21	vfr0ik0Lok0dUn] veFkvk	2	2	0	
22	vfr0ik0Lok0dUn] fldjky	2	1	1	
23	vfr0ik0Lok0dUn] cygjh	2	0	2	
24	vfr0ik0Lok0dUn] Hknoj	2	2	0	
25	vfr0ik0Lok0dUn] cxu	2	2	0	
26	vfr0ik0Lok0dUn] pUnijk	2	2	0	
27	vfr0ik0Lok0dUn] uuhtkj	2	2	0	
	dy ;kx	**70**	**49**	**21**	

1.1 District Profile

The present district of Buxar consists of areas under Buxar Sadar and Dumraon Sub-Division of the old Bhojpur district and came in existence in the year 1991. Buxar town is the headquarter of the district and also its principal town. The district is bounded on the north by Ballia district of U.P., on the south by Rohtas district, on the west by Ghazipur and Ballia districts of U.P. and on the east by Bhojpur district.

Buxar district consist of 2 Sub-division and 11 Blocks. Of the 11 Blocks, 7 are in Dumraon Sub-division while 4 in Buxar Sadar Sub-division. A town is located each in Buxar and Dumraon Sub-division. All the blocks and the towns of the district are distributed within the Sub-division as below:-

Name of Sub-division	**Name of Blocks**	**Name of Towns**
Buxar	Buxar Itarhi Chousa Rajpur	Buxar (Municipality)
Dumraon	Dumraon Nawanagar Brahmpur Kesath Chakki Chougain Simri	Dumraon (Municipality)

NATURE DIVISION

Buxar district consist of two Sub-divisions viz. Buxar Sadar and Dumraon stretching over an area of 1,62,380 hectares. The entire strip of land between the river Ganges on the north and the main line of the Eastern Railways on the South, is a low lying alluvial place. The region is considered to be the best wheat growing area in the the State.

The Ganges forms the northern boundary of the district. The river Karmansa joins the Ganges near Chousa.

CLIMATIC CONDITION

The climate of the district is moderate. The hot weather begins from the middle of March when hot westerly winds begin to blow during the day. The months of April and May are extremely hot, normally the monsoon sets in by the third week of June and continues with intermission till the end of September. The cold weather begins from the months of November and lasts till the beginning of March, January is the coldest month when the temperature comes down as low as 10° C. From the month of April, till the break of monsoon, the district experiences occasional thunder storms also.

RAINFALL

Rain sets sometimes in June accompanied by fall in temperature and increase in humidity. The district experiences maximum rain during the months of July and August. There is slight rainfall in October but November and December are quite dry.

FORESTS

Due to deforestation, the forest area of this district is very thin. Some commom trees of this district are Mango, Seasum, Mahua, Bamboo and some types of long grasses (Jhalas) are found near diara area of the river Ganga. Jhalas grass is mostly used in roat making of kuccha houses.

The forests of the district are not rich in their products. Fire wood is the most important among its products.

The district had variety of wild animals and game birds when the forest were thick. With the increase in irrigation facilities, the area under cultivation has grown, consequently diminishing the forest. The wild animals have suffered in the process and their number has gone down very considerably. Neelgain, spotted deer, are found in the Plains and near the Ganga bank. A considerable number of monkeys are also found in the Buxar Town area.

Birds of different types like Parrot, Patridges, Quails are also found in the district.

IRRIGATION FACILITIES

The river Sone and Ganges are the perennial source of surface water. They can provide irrigation to major portion of agricultural land. In the pre Zamindari abolition days the zamindars used to maintain hars and pynes which served the purpose of both irrigation and drainage.

The district Gazetteer of Shahabad (1966) mention as follows:-

The agricultural prosperity of the district depends on artificial irrigation without which may tracts would be uncultivated and the land would be unable to grow sufficient food crops to sustain its population. The three great sources of irrigation were artificial reservoirs, wells and Sone Canal, all of which helped to supplement the natural supply of water and to compensate for its inadequacy or untimely distribution. Ahars are artificial reservoirs meant to collect the rain water. These long shallow tanks where protected by small embankments and served as artificial catchment basin for receiving the water coming down from the adjacent lands. From the ahars, water channels (pines) are connected. The maintenance of the pines was the responsibility of the landlords.

The swoons of artificial irrigation mentioned so far however are of minor importance as compared to the Sone Canal system which has been the most important source of irrigation in the district.

LAND USE PATTERNS

In this district both the irrigated and non-irrigated areas are being exploited for cultivation purpose. Even some of the large ponds (Jhils) like one at Dumraon which was a duck shooting area have been put to use for cultivation purpose.

Rice, wheat, grams and pluses are the main crops of the district: in some areas near, old Bhojpur vegetables are abundantly grown. These crops and vegetables are transported to other districts. The straw is used as fodder and for rooting the Houses.

MINES AND MINERALS

The mineral resources of this district are negligible.

INDUSTRIALISATION

There are however different types of small scale and cottage industries located in this district of Buxar, the details of which have been given below::

1. Soap Industry: It is mainly concentrated in Buxar and Dumraon.
2. Timber and Furniture works: It is located at Buxar and Dumraon.
3. Leather Industry: There are individual leather workers all over the district. There is a concentration of them at Khilafatpur village in Buxar Sadar Sub-division who are engaged in shoe making. There is shoe making centre in the village which has also been receiving help from the industries department.

LIVE STOCK

The district of Buxar has large majority of the people engaged in agricultural pursuits and deriving their livelihood from agricultural pursuits. The possession of livestock generally adds to the social status of the farmer. The quality of the live stock has improved because of serious efforts by the Government and the response of the farmers. Since the district has quite a large population of prosperous agriculturists mostly due to the suitability of facilities of canal irrigation the farmers of the canal irrigated area have considerably cattle wealth. Agricultural census conducted taken in 1991 shows the cattle wealth of

the district as: Cow-184325, Sheep-15430, Horse-3341, Camel-15, Buffalo-114112, Goat-82186, Mula-240, Ass-1646, Pig-13235, Poultry-70305.

COMMUNICATIONS

The district has been fairly rich in road communication for a longtime. Francis Buchhunan has mentioned in Buxar Journal that there are some very good roads in the district. He travelled by a very good road with brick bridges from Koilwar to Buxar. He also mentioned a few other good roads viz. the great road to Buxar, the Varanasi road to Sasaram and the great road to Dumraon-Patna-Arrah-Buxar road, Behiya-Piro road, Dumraon-Nasriganj road, Sasaram-Bikramganj-Arrah road as also worth mentioning.

Buxar, the district headquarters is on the the main line of the Eastern Railways. The Ganges is navigable all the year round and goods are transported to Kolkatta on the east and places in Uttar Pradesh on the west through the rivers.

CREDIT FACILITIES

The Central Co-operative Banks located in the important towns of the district work as the pivot of Co-operative banking and credit. All the Co-operative Societies are supposed to be affiliated to these banks for credit facility/these banks finance Co-operative institutions which in turn pass on the same to their members. Financing by these banks is restricted to short term and medium term loans for agricultural purposes only. Short term loans are advanced to agriculturist members to meet their needs of seeds, manures etc. Medium term loans are advanced for purchase of live stock, agricultural implements etc.

TRADE AND COMMERCE

The important wholesale markets in the district are at Buxar and Dumraon. The main commodities exported from Buxar Railway Station are rice, paddy, gur, mango, and the main imports are engineering goods, medicine etc.

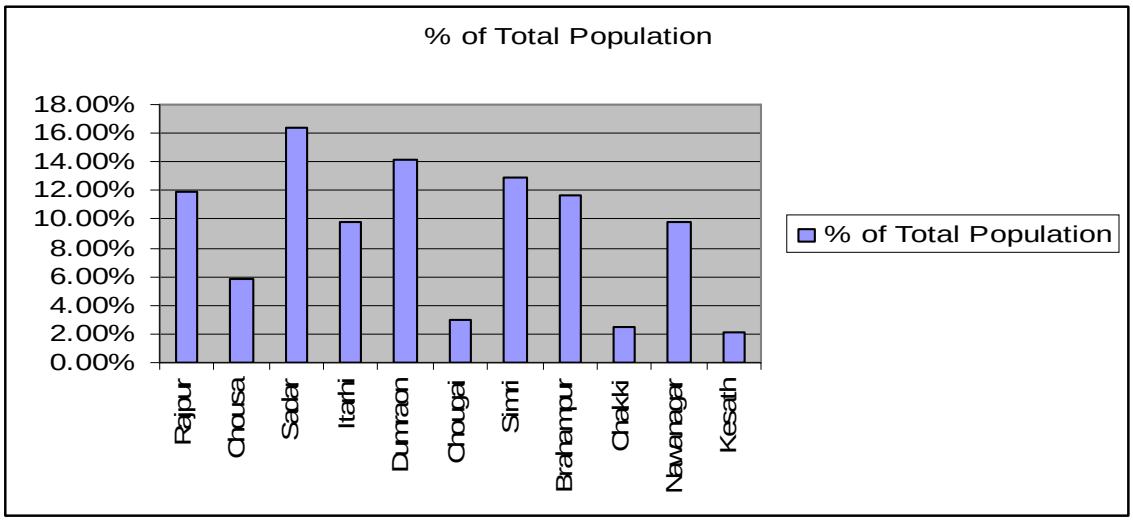
Buxar is a district town and an important trade centre. It is also served by railways, roadways and waterways. It is located on the bank of river Ganges and the main trade of the town is grain, vegetables, fish and manufactured goods of jail industry (Central Jail, Buxar manufactures, carperts etc.). There are also a number of mandies and important marketing centres located at Arrah and Buxar.

POPULATION DISTRIBUTION & SEX RATIO :-

Blockwise population distribution % of Total population and Sex Ratio :

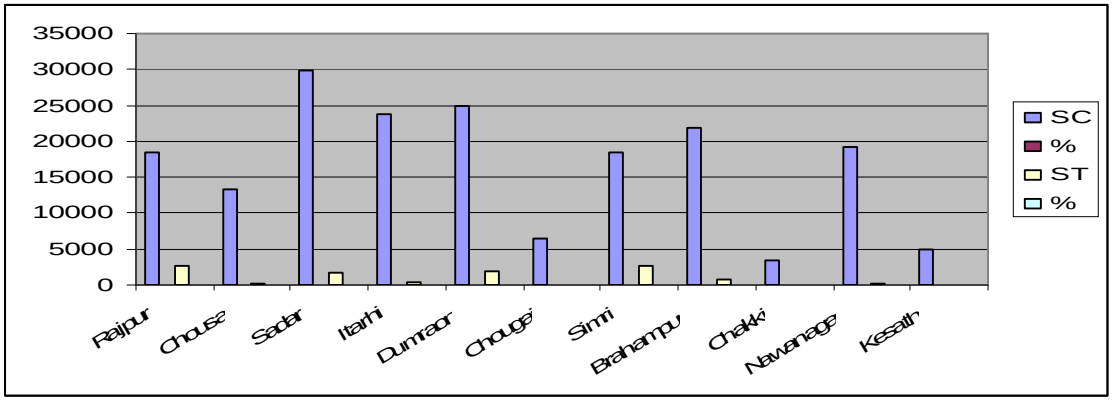
Sl. No.	Name of Block	Population (2001 Census)	% of Total Population
01	**Rajpur**	166556	**11.87 %**
02	**Chousa**	82149	**5.86%**
03	**Sadar**	229521	**16.36%**
04	**Itarhi**	137206	**9.78%**
05	**Dumraon**	198925	**14.18%**

06	**Chougai**	42550	**3.03%**
07	**Simri**	**181003**	**12.91%**
08	**Brahampur**	**163855**	**11.68%**
09	**Chakki**	**34133**	**2.43%**
10	**Nawanagar**	137569	**9.81%**
11	**Kesath**	28929	**2.06%**
	TOTAL	1402396	



Blockwise SC / ST population & % of Total population:

Sl. No.	**Name of Block**	**Population (2001 Census)**	SC	%	**ST**	%
01	**Rajpur**	166556	18370	11.03%	2634	1.58%
02	**Chousa**	82149	13349	16.24%	214	0.26%
03	**Sadar**	229521	29873	13.02%	1764	0.76%
04	**Itarhi**	137206	23769	17.32%	473	0.34%
05	**Dumraon**	198925	24840	12.49%	1952	0.98%
06	**Chougai**	42550	6377	14.99%	30	0.07%
07	**Simri**	181003	18370	10.1%	2634	1.5 %
08	**Brahampur**	163855	21846	13.33%	667	0.41%
09	**Chakki**	34133	3339	9.78%	81	0.24%
10	**Nawanagar**	137569	19283	14.02%	191	0.14%
11	**Kesath**	28929	4904	16.95%	23	0.08%
	TOTAL	1402396	198014	14.11%	8428	0.60%



GROWTH RATE:-

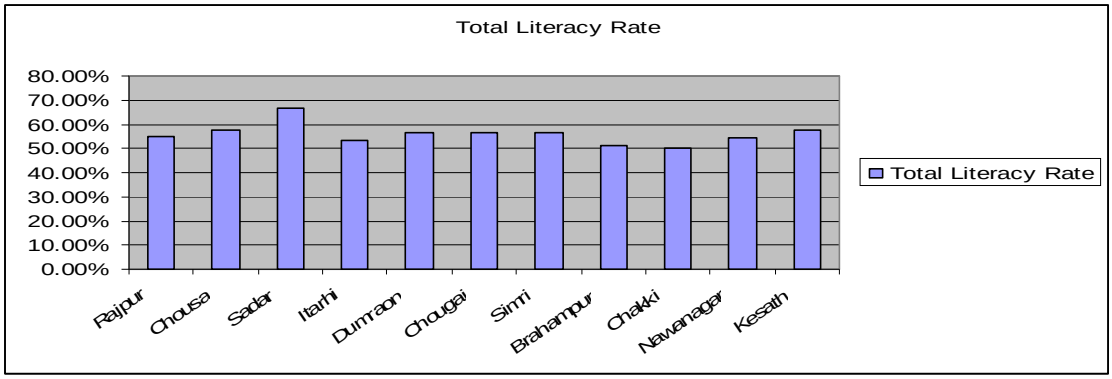
The district has a population of 1402396. The district has experienced an annual exponential growth rate of 2.33 %. (Census 2001)

LITERACY RATE:-

The literacy rate (population age 7+ years) of the district is 60.59 percent, with 74.07 Percent for males and 46.36 percent for females, which are comparable to the respective rates in the state. Thus, in terms of urbanization, Buxar district is at a disadvantageous Position as compared to the state as a whole. (DLHS RCH-II 2002)

Blockwise literacy rate % of Total Rate:

Sl. No.	**Name of Block**	**Population (2001 Census)**	Total Literacy Rate
01	**Rajpur**	166556	54.7%
02	**Chousa**	82149	57.7%
03	**Sadar**	229521	66.9%
04	**Itarhi**	137206	53.5%
05	**Dumraon**	198925	56.7%
06	**Chougai**	42550	56.3%
07	**Simri**	181003	56.4 %
08	**Brahampur**	163855	51.1%
09	**Chakki**	34133	49.9%
10	**Nawanagar**	137569	54.2%
11	**Kesath**	28929	57.5%
	TOTAL	1402396	



VITAL RATES:-

The Crude Birth rate & crude death rate of the district is 25.6 & 7.4 respectively. The infant mortality rate of the district is 57; neonatal mortality rate is 40.2 & the post neonatal mortality rate 17.07. (DLHS RCH II 2002)

WORK PARTICIPATION:--

Around 45.08 % of the population is working class out of which 53.30% are males & 36.27 % are females. But district is having 46.70% Male & 63.73 Female unemployed out of 54.92 % of total unemployed population. This shows that it is economically underdeveloped & thus is a matter of concern for the district. (Census 2001) The reason for unemployment can be the low literacy rate of the district.

District Health Administrative Setup

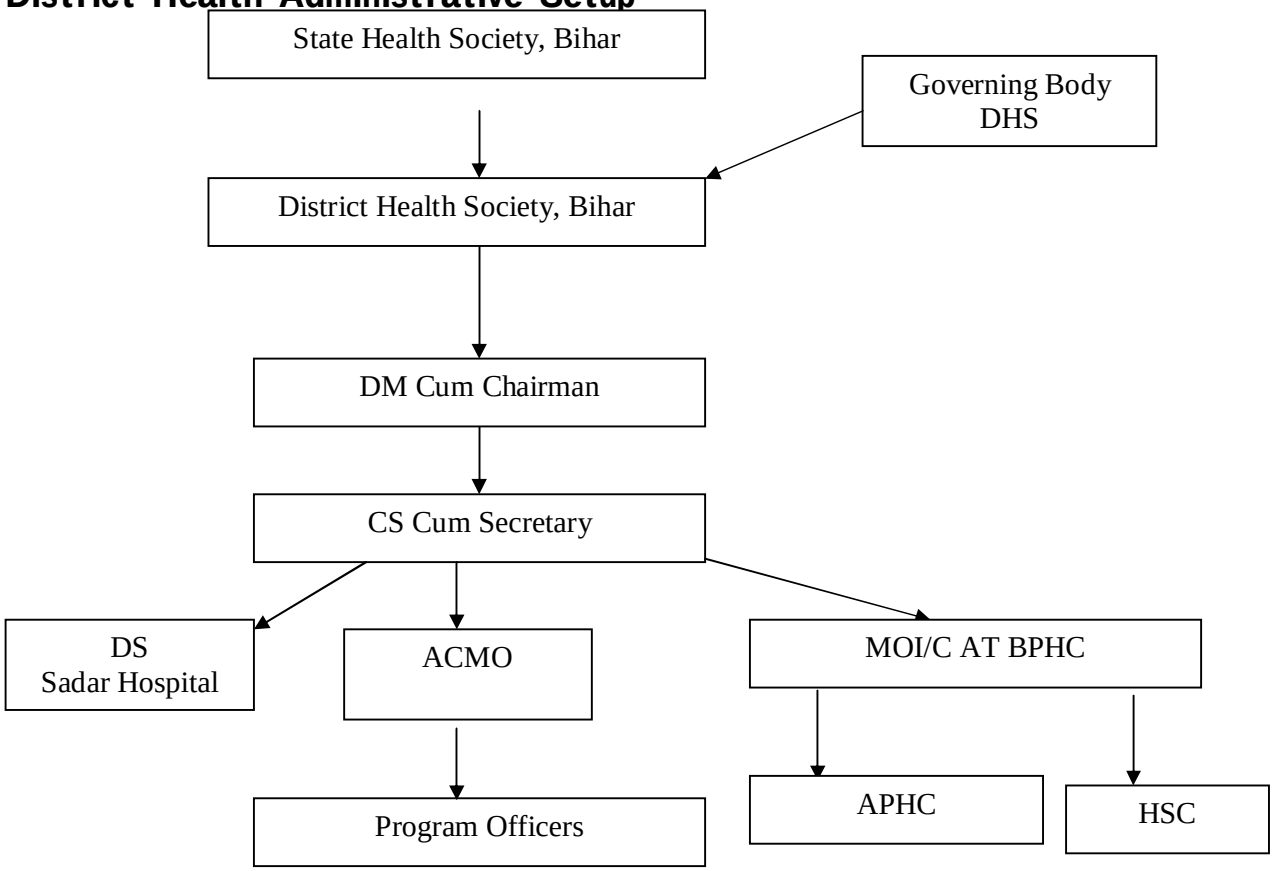


Table 1: Buxar District at a Glance

Total Area	17575 sq km
Population in thousands	2430
Rural Population	1273422
Urban Population	128974
Number of sub-divisions	2
Number of blocks	11
Total no. of Panchayats	142
Number of villages	1134
Decadal growth rate	27.2
Sex Ratio	899
Percent of urban population	9.2
Percent of SC population	14.1
Percent of ST population	0.6
Male Literacy Rate (7Yrs. & above)	40.4
Female Literacy Rate (7Yrs. & above)	72.8
Total literacy	56.80
Total workers	408186
No. of Medical College	0
No. of Government of India Hospitals (military, railways, ESI, CGHS)	1
NGO Hospitals and centres undertaking RI with government vaccines	1
Total ICDS projects	11
Total Number of Anganwadi centres	1403

बक्सर जिला की सामान्य सूचनाएँ		
1	जिला की भौगोलिक स्थिति	25 डिग्री 34 मिनट आक्षांश उत्तर, 83 डिग्री 58 मिनट आक्षांश पुरब
2	जिला की चौहद्दी	उत्तर मे गंगा नदी, दक्षिन मे रोहतास, पुरब मे भोजपुर व पश्चिम में गाजीपुर (उत्तर प्रदेश)
3	जिला का स्थापना दिवस	17 मार्च 1991
4	जिले का वातावरण	Extreme type
5	अनुमण्डल की संख्या	2
6	कुल प्रखण्डॉ की संख्या	11
7	कुल अंचल की संख्या	11
8	थानों की संख्या	16
9	चौकी	5
10.	कुल पंचायतो की संख्या	142
11	कुल ग्रामों की संख्या	1134 (811- चिरागी)
12	कुल शहरी क्षेत्र की संख्या	2
13.	बक्सर जिला का भौगोलिक क्षेत्रफल	17575 वर्ग किलो मीटर
14.	औसत वर्षापात (2007)	312.6 mm
15	अंगीभूत महाविधालय	2
16	कॉलेज	15
17	विद्युतीकृत गांवों की संख्या	337
18	उच्च विद्यालय	68
19	मध्य विद्यालय	271
20	प्रथमिक विद्यालय	836
21	बुनियादी विद्यालय	7
22	पक्की सड.को की लम्बाई	175 किलोमीटर
23	कच्ची सड.को की लम्बाई	350 किलोमीटर
24	लघु उद्योग	492

25	उप स्वास्थ केन्द्र	161
26	राजकीय नलकूप	199
27	बैंको की कुल संख्या	75
28	मुख्य फसल	धान,गेहुं, दलहन ,तेलहन
29	मुख्य नदीयां	गंगा ,ठोरा, कर्मनाशा, धर्मावती
30	प्रमुख मेला	पंचकोश,खिचरी, आमावस्या, वामनद्वादशी
31	आध्यात्मिक स्थल	श्री रामेश्वर नाथ धाम, श्री सोमेश्वर धाम, श्री च्यवन आश्रम, वामन स्थान, गौरीशंकर मंदिर ।
32	दर्शनीय स्थल	श्री लक्ष्मीनारायण मंदिर, श्रीनाथ बाबा मंदिर, श्री खाकी बाबा आश्रम, नौलखा मंदिर, श्री सीता राम विवाह महोत्सव स्थल, शहीद बाबा का मजार , नवरत्न का किला , डुमरेजनी माई का मंदिर , बाबा ब्रम्होश्वर का मंदिर ।
33	ऐतिहासिक स्थल	चौसा लडाई का मैदान, कथकौली
34	नजदीकी हवाई अड्डा	पटना

FROM CENSUS 2001

No. of Household	192426	Household size	7.3
Population	1402396	Proportion of Urban population	9.2
Rural Population	1273422	Sex Ratio	899
Urban Population	128974	Proportion (0-6 yrs)	925
Population (0-6 yrs)	271849	SC	890
SC	198014	ST	843
ST	8428	Proportion of SC	14.1
Literates	642167	Proportion of ST	0.6
Illiterates	760229	Literacy rate	56.8
Total workers	408186	Illiteracy rate	67.2
Main workers	305398	Work Participation rate	29.1
Marginal workers	102788	% of Main workers	21.8

Summary of DHAP process in Buxar

The District Health Action Plan of Buxar has been prepared under the guidance of the Chief Medical Officer and the Additional Chief Medical Officer of Buxar with a joint effort of the District Health Educator, the BMOs and various M.O-PHCs as well as other concerned departments under a participatory process. The field staffs of the department have also played a significant role. Public Health Resource Network has provided technical assistance in estimation and drafting of various components of this plan.

Summary Of The Planning Process
Training of district team for preparation of DHAP
Preliminary meeting with CMO and ACMO along with other concerned officials
Data Collection for Situational Analysis - MOIC and BHM meeting chaired by CMO/CS & ACMO.
Block level consultations with MOICs and BHMs
Writing of situation analysis
District Planning workshop to review situation analysis and prepare outline of district health plan- the meeting was chaired by CMO and facilitated by ACMO. The workshop was attended by MOICs, BHMs and other key health functionaries at the district level.
District Consultations for preparation of 1st Draft
Preliminary appraisal of Draft
Final Appraisal
Final DHAP: Submission to DHS and State
Adoption by DHS and Zila Parishad
Printing and Dissemination

Situation Analysis of Health Facilities

The three tiers of the Indian public health system, namely village level **Sub centre, Additional Primary Health Centre and Primary Health Centres** were closely studied for the district of Buxar on the basis of three crucial parameters:

1) Infrastructure
2) Human resources and
3) Services offered at each health facility of the district.

The Indian Public Health System (IPHS) norms define that a Village **Health Sub centre** should be present at the level of 5000 population in the plain regions and at 2500-3000 population in the hilly and tribal regions. As most of the Buxar is situated in the plain terrain, the norm of Sub centre per 5000 population is expected to be followed. A sub centre is supposed to have its own building with a small OPD area and an exam room.. Sub centres are served by an ANM, Lady Health Volunteer and Male Multipurpose Health Worker and supported by the Medical Officer at the APHC. Sub centres primarily provide community based outreach services such as immunization, antenatal care services (ANC), perinatal and post natal care, management of mal nutrition, common childhood diseases and family planning. It provides drugs for minor ailments such as ARI, diarrhea, fever, worm infection etc. The Sub centre building is expected to have provisions for a labour room, a clinic room, an examination room, waiting area and toilet. It is expected to be furnished with essential equipment and drugs for conducting normal deliveries and providing immunization and contraceptive services. In addition equipment for first aid and emergency care, water quality testing and blood smear collection is also expected to be available.

The **Additional Primary Health Centre (APHC)** is required to be present at the level of 30,000 populations in the plain terrain and at the level of 20,000 populations in the hilly region. A PHC is a six bedded hospital with an operation room, labour room and an area for outpatient services. The PHC provides a wide range of preventive, promotive and clinical services. The essential services provided by the PHC include attending to outpatients, reproductive and child health services including ANC check-ups, laboratory testing during pregnancy, conducting normal deliveries, nutrition and health counseling, identification and management of high risk pregnancies and providing essential newborn care such as neonatal resuscitation and management of neonatal hypothermia and jaundice. It provides routine immunization services and tends to other common childhood diseases. It also provides 24 hour emergency services, referral and inpatient services. The PHC is headed by an MOIC and served by two doctors. According to the IPHS norms every 24 *7 PHC is supposed to have three full time nurses accompanied by 1 lady health worker and 1 male multipurpose worker. NRHM stipulates that PHC should have a block health manager, accountant, storekeeper and a pharmacist/dresser to support the core staff.

According to the IPHS norms, a **Primary Health Centre** (PHC) is based at one lakh twenty thousand population in the plain areas and at eighty thousand populations for the hilly and tribal regions. The Primary Health Centre is a 30 bedded health facility providing specialized care in medicine, obstetrics & gynecology, surgery, anesthesia and pediatrics. IPHS envisage CHC as an institution providing expert and emergency medical care to the community.

In Bihar, CHCs are absent and PHCs serve at the population of one lakh while APHCs are formed to serve at the population level of 30,000. The absence of CHC and the specialized health care it offers has put a heavy toll on PHCs as well as district and sub district hospitals. Moreover various emergency and expert services provided by CHC cannot be performed by PHC due to non availability of specialized services and human resources. This situation has led to negative outcomes for the overall health situation of the state.

1. Situation Analysis: Health Sub centre level Infrastructure

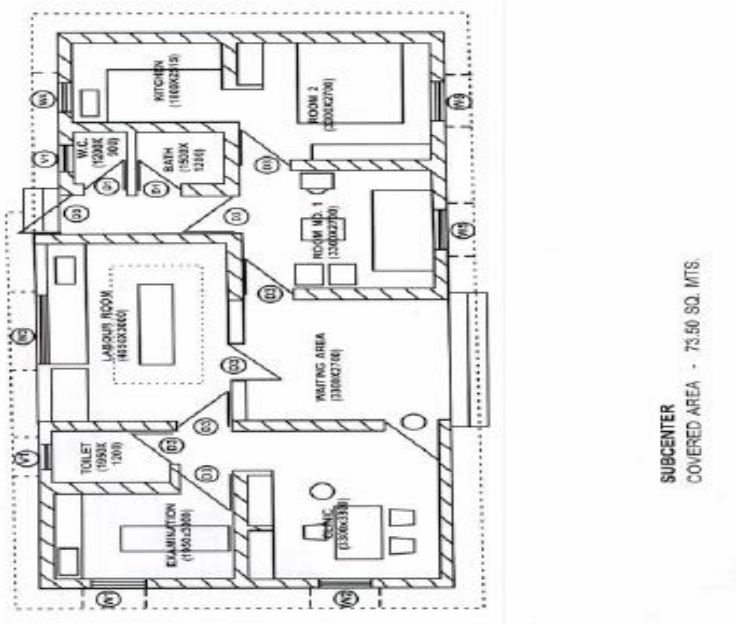
Table 1: Sub centre Data

Name of Block	Total Population	Total requirement as per District Database	PRESENT (functional)	ALREADY PROPOSED	Further requirement based on District Database
1. RAJPUR	166556	33	29	04	00
2. CHOUSA	82149	20	03	14	03
3. SADAR	229521	46	13	29	04
3. ITARHI	137206	28	18	09	01
4. DUMRAON	198925	41	22	14	05
6. CHOUGAI	42550	09	05	04	00
7. SIMRI	181003	36	20	16	00
8. BRAHAMPUR	163855	33	24	06	01
9. CHAKKI	34133	07	02	07	00
10. NAWANAGAR	137569	27	21	04	02
11. KESATH	28929	06	04	02	00
Total	1402396	286	161	109	16

Table No. 4 presents the additional requirements of Sub centres as per population norms mandated by IPHS as well as according to the database available with District Health Society Buxar. As per IPHS norms, Buxar district requires a total of 286 Sub centres of which 161 are present in the district.

2. Situation Analysis: Health Sub centre level Infrastructure and Human Resource (Detailed)

Typical Layout of Sub- Centre with ANM Residence



Waiting Area : 3300mm x 2700mm

Labour Room : 4050mm x 3300mm

Clinic room : 3300mm x3300mm

Examination room : 1950mm x 3000mm

Toilet : 1950mm x 1200mm

Residential accommodation: this should be made available to the Health workers with each one having 2 rooms, kitchen, bathroom and WC. Residential facility for one ANM is as follows which is contiguous with the main sub centre area.

Room -1 (3300mm x 2700mm)

Room-2(3300mm x 2700mm)

Kitchen-1(1800mm x 2015mm)

W.C.(1200mm x 900mm)

Bath Room (1500mm x 1200mm)

One ANM must stay in the Sub-Centre quarter and houses may be taken on rent for the other/ANM/Male Health worker in the sub centre village. This idea is to ensure that at least one worker is available in the Sub-Centre village after the normal

working hours. For specifications the “Guide to health facility design” issued under Reproductive and Child Health Program (RCH-I and II) of Government of India, Ministry of Health and Family Welfare may be referred.

Table 2 Sub centre Details

	Rajpur	Sadar + Chousa	Itarhi	Dumraon + Chougai	Simri	Nawanagar + Kesath	Brahampur + Chakkit
Total Number of Sub centres	29	17	18	26	20	25	26
ANM posted	29	16	18	26	20	25	26
ANMs present	29	16	18	26	20	25	26
ANMs regular	29	16	18	26	20	25	26
ANMs contract	11	15	10	12	12	14	11
ANM residing at HSC	04	08	00	11	00	04	02
Residential facility for ANM required	02	02	02	02	02	02	02
HSC in Govt building	03	05	04	04	03	05	04
HSC in Panchayat building	01	02	02	00	00	02	06
HSC in rented Building	22	09	12	18	13	19	15
SC building under construction	00	00	00	00	00	00	00
Building required	22	09	12	18	13	19	15
Running water supply available	00	00	00	00	00	00	00
Water supply required	29	17	18	26	20	25	26
Cont. power Supply	00	00	00	00	00	00	00
Power supply required	29	17	18	26	20	25	26
Untied Funds	00	00	00	00	00	00	00

3. Situation Analysis: APHC level Infrastructure

The gaps in the availability of PHC are calculated as per the IPHS norms of one APHC at the level of 30,000 populations. However in Bihar, the current state practice is one PHC at one lakh population level. Since the APHCs function at the level of 30,000 populations at present in Bihar, the number of present and proposed APHCs is taken into account for the purpose of calculating the overall requirement of PHCs. The matrix also estimates requirement of CHCs in each block. Like Sub centres, the district has also proposed APHCs. A total 32 APHCs are proposed and 27 has sanctioned by the Sanchalan committee.

Table 3 APHC Details

Name of Block	Total Population	Total requirement as per District Database	PRESENT (functional)	ALREADY PROPOSED	Further requirement based on District Database
1. RAJPUR	166556	04	02	03	01
2. CHOUSA	82149	01	01	01	00
3. SADAR	229521	07	01	06	01
3. ITARHI	137206	04	01	03	01
4. DUMRAON	198925	06	01	06	00
6. CHOUGAI	42550	01	00	01	00
7. SIMRI	181003	03	03	02	01
8. BRAHAMPUR	163855	02	04	01	01
9. CHAKKI	34133	00	00	00	00
10. NAWANAGAR	137569	03	02	03	00
11. KESATH	28929	01	00	01	00
Total	1402396	32	15	27	05

4. Situation Analysis: APHC level infrastructure and Human Resource (Detailed)

In Bihar Additional PHCs operate at the population of 30,000. The APHC is the cornerstone of the public health system since it serves as a first contact point for preventive, curative and promotive health services. It is the first port of the public health system with a full time doctor and provision for inpatient services. There are 15 functional APHCs in Buxar. 27 new APHCs are newly sanctioned. In general the APHCs in Buxar suffer from:

- lack of facilities including availability of building
- constant power and water shortages
- unavailability of doctors
- doctors not residing at the facility
- insufficient quantities of drugs and equipment
- lack of capacity to use untied funds.

Table 4: APHC Human Resource

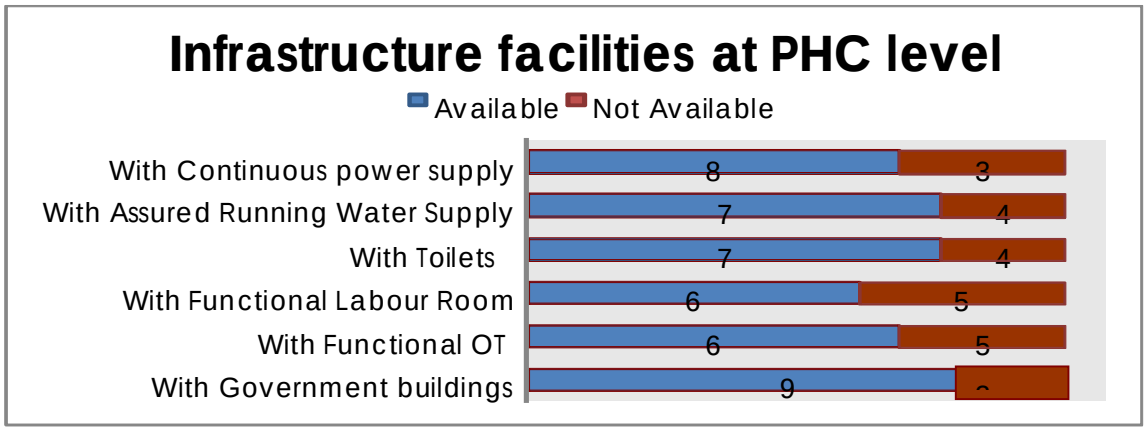
		Mahdeh	Sarenja	Manikpur	Manoharpur	Nihalpur	Dullahpur	Rajapur	Badka Sinhannura	Amathua	Sikrol	Belahari	Bhadwar	Bagen	Chandrapura	Nainijor
Total No. of APHC		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Doctors	2 Drs Sanctioned	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	1 Drs Sanctioned	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2 Drs in Position	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	1 Drs in position	0	1	1	1	1	0	0	1	0	0	0	0	0	0	0
	0 Drs in position	0	0	0	0	0	1	1	0	1	1	1	1	1	1	1
ANM	2 ANMs Sanction	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2 ANM in position	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	1 in position	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0
	0 in position	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laborator	Sanctioned	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	in Position	1	1	0	1	0	0	0	0	1	0	0	0	0	0	0
Pharmacis t/Dresser	Sanction	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	in Position	1	1	0	1	0	1	0	0	1	1	1	1	0	1	1
Nurses	2 Sanctioned	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2 in Position	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1 in position	1	0	0	1	0	0	0	1	0	1	0	0	0	0	0

		Mahdeh	Sarenja	Manikpur	Manoharpur	Nihalpur	Dullahpur	Rajapur	Badka Sinhannura	Amathua	Sikrol	Belahari	Bhadwar	Bagen	Chandrapura	Nainijor
Total No. of APHC		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	0 in position	0	0	0	0	0	0	3	1	0	0	0	0	0	0	4
Accountant	In position	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peon	In position	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1
Sweeper	In position	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Specialist		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

5. Situation Analysis: PHC Infrastructure

PHCs fare well in terms of infrastructure as compared to APHC and Health Sub centres. All the PHCs in the district are based out of government buildings. Out of 09 functional PHCs, 06 have functional OT and labour rooms. Yet the condition of the operation theatres and labour rooms needs to be improved in nearly all the PHCs. PHCs such as Itarhi, Nawanagar and Brahampur require major repair work to make their Labour Rooms fully operational. Toilets are available in all the PHCs except Nawanagar. PHCs are in better condition in terms of running water supply and continuous availability of power. Out of 11 PHCs, 10 have access to running water and 9 have continuous power supply.

The main problem at the PHC level is not the total lack but inadequacy of facilities. As PHC serves 1 lakh twenty thousand population, the level of infrastructure in terms of size of building, number of rooms, and size of wards is clearly inadequate. The gaps arise as the infrastructure was designed to serve 30,000 populations.



A detailed version of status of infrastructure at all the PHCs is as follows:

Table 5 : PHC Infrastructure

	Rajpur	Sadar	Chousa	Simri	Itarhi	Dumraon	Chougai	Brahampur	Chakki	Nawanagar	Kesath
Building	Govt	Govt	Govt	Govt	Govt	Govt	Govt	Govt	Govt	Govt	NA
Building Condition	Good but insufficient	Good but insufficient	Good but insufficient	Good but insufficient	Good but insufficient	Good but insufficient	Good but insufficient	Good but insufficient	Major Repairs	Good but insufficient	NA
Running Water Supply	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	NO
Power Supply	NO	YES	NO	NO	YES	YES	NO	NO	NO	NO	NO
Toilets	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	NO
Functional Labour Room	YES	NO	NO	YES	YES	YES	YES	YES	NO	YES	NO
Condition of Labour Room	YES	NO	NO	YES	YES	YES	YES	YES	NO	YES	NO
Functional OT	YES	NO	NO	YES	YES	YES	YES	YES	NO	YES	NO
Condition of OT	Inadequate	NA	NA	Adequate	Adequate	Adequate	Not started	Adequate	NA	Adequate	NA
Condition of ward	Inadequate	NA	NA	Adequate	Adequate	Adequate	Not started	Adequate	NA	Adequate	NA

6. Situation Analysis: PHC Human Resources

Most of the PHCs are served by three doctors in position. Availability of specialists is still a major constraint for the district. The situation regarding number of ANMs at PHC level is satisfactory since the gap between sanctioned and in position is either absent or very narrow for most of the PHCs. Pharmacists are sanctioned in all the PHCs but are in position only 6 of them. Similarly Store keepers are in position in 9 PHCs. The biggest gap is in the availability of Staff Nurses. All other PHCs donot yet have nurses sanctioned or in position. District's human resources availability across all the PHCs can be summarised as follows:

Table 6 : Human Resources at PHC

		Number of PHCs
Doctors	**Number of PHCs with 4 and more sanctioned doctors**	**0**
	Number of PHCs with 4 and more doctors in position	**0**
	Number of PHCs with 3 doctors sanctioned	**11**
	Number of PHCs with 3 doctors in position	**8**
	Number of PHCs with 2 or less than 2 doctors sanctioned	**0**
	Number of PHCs with 2 or less than 2 doctors in position	**3**
	Total number of doctors	**80**
	Regular Doctors	**61**
Specialists	**PHCs with 2 specialist**	**0**
ANMs	**PHCs with 3 or more than 3 ANMs**	**6**
	PHC withless than 3	**5**
Nurses	**PHCs with Nurses**	**0**
Lab tech	**PHCs with lab tech sanctioned**	**11**
	PHCs with lab tech in position	**07**
Pharmacist	**PHCs with at least 1 pharmacist sanctioned**	**11**
	PHCs with at least 1 pharmacist in position	**6**
Store keepers	**PHCs with storekeepers**	**9**

7. Situation Analysis: Support Services at PHCs:

Table 7 : Support Services at PHC

PHC Services at a Glance	
Total number of PHCs	11
Availability of Ambulance	6
Generator	6
X – Ray	0
Laboratory Services (Pathology)	6
Laboratory Services (Malaria/Kalazaar)	0
Laboratory Services (T.B)	7
Canteen	0
Housekeeping	1
Rogi Kalyan Samiti set up	11
Untied funds received	7
Untied funds utilized	7

8. Situation Analysis: Sub Divisional Hospital (SDH)

Table 8 : Human Resource at SDH

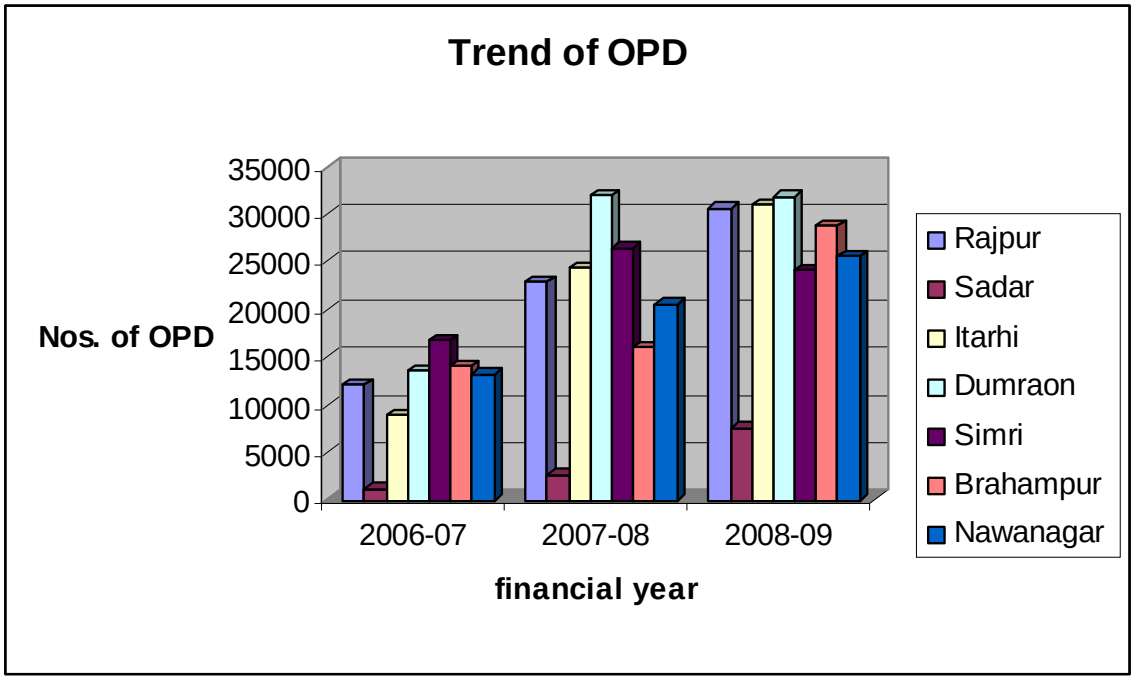
		SDH Buxar
Doctors	Sanctioned	07
	In position	03
ANMs	Sanctioned	02
	in Position	02
Laboratory Technician	Sanction	01
	in Position	01
Pharmacist/Dresser	Sanctioned	02
	in Position	01
Nurses	Sanctioned	02
	in position	02
Storekeeper	in position	01
Specialist	in position	00

9. Situation Analysis: Service Delivery

The infrastructure, human resources and support services available for the PHCs need to be compared with the work burden of each PHCs. Primary data for outpatient services given in the table below indicates significant work pressure on all the PHCs in the district.

Table 9: Treatment of OPD Patients in PHCs

Name of PHCs	2006-07	2007-08	2008-09
Rajpur	12061	22854	30650
Sadar	1177	2689	7552
Itarhi	8961	24331	30965
Dumraon	13585	31968	31824
Simri	16689	26415	24069
Brahampur	14121	15973	28808
Nawanagar	13243	20563	25517
Total	79837	144793	179385



10. Situation Analysis: Reproductive and child health

Salient RCH statistics for the district are given in the district profile section of this document. Mentioned below are the performance figures of PHCs across the district. The below mentioned data is for the financial year 2008-09.

Table 10: Reproductive and Child Health (08-09)

Sl.No.	Name of PHC	TT Vaccination	Measles Vaccine	Institutional Delivery	Family Planning
1	Rajpur	4765	7163	1603	419
2	Sadar	4876	3897	00	127
3	Itarhi	4193	4051	2054	361
4	Dumraon	8164	7325	1648	230
5	Simri	4716	4600	1267	251
6	Brahampur	5675	5085	1443	296
7	Nawanagar	4765	5816	2180	451
8	SDH, Buxar	00	00	3613	725
	Total	**25948**	**36040**	**13808**	**2860**

11. Situation Analysis: ASHA Training

Accredited Social Activist (ASHA) is a key strategy of the NRHM to link the community with the health systems. ASHA works with the community to raise awareness about various health programmes, provide basic health knowledge, and provide information on health practices thus generating demand for health services. She also helps and supports the community to access health services. Proper selection and training of ASHAs is a crucial step for the success of NRHM. In Buxar ASHAs have been selected in all the blocks. In most of the blocks ASHAs have completed two rounds of training, while in some of the blocks they have completed one round of training. Only one Block Simri has not completed their most targets for the give target. Salient information related to ASHAs in the district can be found in the matrix below:

Table 11: Selection and Training of ASHA

Target (Total no. of ASHA to be selected)= 1273						
Total No. of ASHA selected(till date)= 1102						
Sl.No.	Name of PHC	Total Target	Total No. of ASHA selected	Total No. of ASHA not selected	Total No. of ASHA Trained	Total No. of ASHA Untrained (among selected)
1	Rajpur	213	205	08	185	20
2	Sadar	182	176	06	156	20
3	Itarhi	137	107	30	92	15
4	Dumraon	196	189	07	164	25
5	Simri	181	63	118	52	11

6	**Brahampur**	198	198	00	198	00
7	**Nawanagar**	166	166	00	141	25
Total		**1273**	**1104**	**169**	**988**	**116**

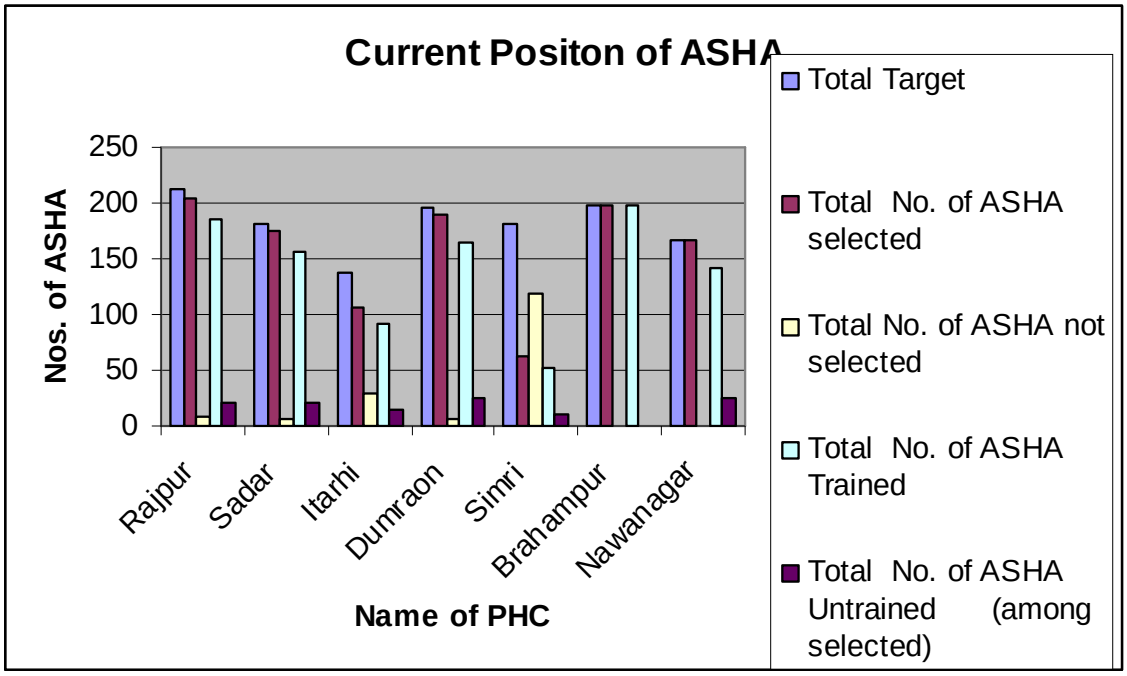


Table 12: Aanganwadi workers in PHCs

Name of PHC	No. of AWW	
	Sanction	Present
Rajpur	167	165
Sadar + Urban	312	290
Itarhi	137	131
Dumraon	241	231
Simri	182	77
Brahampur	197	193
Nawanagar	167	161
Total	1403	1348

For Buxar and Bihar NRHM is a challenging task. However it also provides the opportunity to identify gaps, innovate and invest in the public health system. The above situation analysis presents a detailed review of the status of infrastructure, human resources and services in the district. This analysis can be used as a baseline from which to design new strategies and approaches to achieve the goals of the National Rural Health Mission in Buxar.

Reproductive and Child Health

A. Maternal and Neonatal health

Objectives

- Ensuring 100% registration of pregnant women for ANC
- Increase in the percentage of pregnant women registered in the first trimester from 23% to 50%
- Increase in the percentage of pregnant women with full ANC from 20% to 50%
- Ensuring that 50% of pregnant women receive 2 TT injections.
- Ensuring that 50% of pregnant women consume 100 IFA tablets
- Increase in skilled attendance during delivery from 15% to 30%
- Increase in institutional delivery from 30% to 60%
- Increase in the percentage of mothers receiving postnatal care within 48hrs of delivery from 24% to 50%
- Increase in percentage of neonates breastfed within 1 hour of birth from 23% to 50%
- Ensuring colostrums feeding of 50% of neonates
- Ensuring that all newborns are weighed within 48 hrs of birth
- Facility and community based management of sick newborns and low birth weight babies

Ante-natal Care			
Situation Analysis: For Buxar as per DLHS 3 figures, percentage of pregnant women registered for ANC is only 25.3%. Mothers who receive at least 3 ANC visits during the last pregnancy is 22.1%, percentage of mothers who got at least one TT injection in their last pregnancy is 41.2%. Percentage of mothers who were motivated by ASHA for ante natal care is 6.8%.			
Strategies	Activities	Budget	Remarks
• Increasing early registration through counseling of eligible couples by ASHAs and ANMs and distribution of home based pregnancy kits	• Training of ASHAs for counseling of eligible couples for early registration and the use of the home based pregnancy kit • Regular updating of the ANC register. • Preparation of the due list with the dates for Ante Natal Checkups for every pregnant	**Handbills** Printing 5000 Hand-bills @ Rs 500 for 161 HSCs =Rs80,500.0 **Pregnancy kits** 1ASHAs*Rs30/pregnancy kit*10 kits*4 quarters= Rs.1527600.00	• Campaigning for registration for ANC along with immunization budget • Monthly Mahila Mandal days budgeted in immunization section • ANC (SBA) trainings for ANM. For details refer to training section.

• Case management of pregnant women to ensure that they receive all relevant services by ASHAs and ANMs • Creating awareness about maternal health through Mahila Mandal day • Providing ANC along with immunization services on immunization days • Strengthening ANC services at the Sub centre level by ensuring availability of appropriate infrastructure, equipment and supplies • Ensuring quality ANC through appropriate training of the ANM • Effective monitoring and support to HSCs for ANC by	woman in the Sub centre area. • Preparing format for the due list in Hindi. • Training ASHAs and AWWs to fill out and update due list and ANC schedule list for every pregnant woman in their work area. • Organizing Antenatal checkups on immunisation days. • ASHAs and AWWs to coordinate with ANM to provide Antenatal care according to the ANC schedule maintained in the register for every expectant mother. ASHAs and AWWs to track left outs and drop outs before every ANC & immunisation day and ensure their participation for the coming day. • Organizing Mahila Mandal day to share information and create awareness about maternal and child health on every third Friday of the month at each AWC. • Wide publicity of Mahila Mandal day. • Training to ANMs to provide complete Ante natal care and		• The handbill would include information on ANC days, immunisation days, breast feeding practices, RTI/STI counseling days, Family Planning, RCH camps days at APHC level.

APHC. • Setting up of referral transport system at every APHC level.	identify high risk pregnancies. • Strengthening of Sub centre in terms of equipment to conduct ANC services. (refer to health facilities section) • Ensuring regular supply of IFA tablets at each Sub centre level. (refer to health facilities section) • Setting up Helpline with Ambulance at every PHC (APHC). (refer to health facilities section)		

Natal, neo-natal and postnatal care

Situation Analysis: Percentage of institutional deliveries in Buxar district is low at 30%. Deliveries at home assisted by doctors or another skilled attendant such as a nurse/LHV/ANM is even lower at 15% whereas only 24% of mothers received postnatal care within 48 hours of delivery for their last child. Factors leading to the low rates of assisted and institutional deliveries include a shortage of Sub centres, poor infrastructure and skills at the Sub centre level and an almost exclusive focus of the Sub centre on immunization activities. Similarly, APHCs suffer from severe shortages in labour rooms and medical officers, though staff nurses have recently been appointed. There are currently no APHCs providing 24X7 services and no ambulance services available at the APHC level. Also, because of lack of appropriate infrastructure most mothers are not able to stay for the required 48 hrs at the facility. At the PHC level the District faces a shortage of Gynecologists and Pediatricians. 03 PHCs in the district – Chousa, Chakki and Kesath do not have fully functional labour rooms due to newly established PHCs and almost no PHC has blood storage facilities. There is also a need of appointing lady doctors at APHC, PHC, CHC and above.

In addition, breastfeeding practices need to be improved. According to DLHS 3, only 22.6% infants were fed within one hour of birth. While 36.1% children were exclusively breastfed for 6 months and only 30% of neonates received a check up within 24 hours after delivery. There are almost no facilities for the management of sick newborns. Infant mortality rate for Buxar is reported to be 52 as per 2001 census data which, although down from 70 in 1991, is still quite high.

Furthermore, there are have been problems in the implementation of the Janani and Bal Suraksha Yojana (JBSY) launched to increase the utilization of ANC, assisted

deliveries and postnatal care and immunisation services with delays in payments.		
Strategies	Activities	Budget
• Strengthening 25% of APHCs to provide 24*7 services • Strengthening 87% of APHCs to provide institutional delivery care. • Strengthening 12 of 16 PHCs to provide institutional delivery care • Setting up 5 CHCs to provide Emergency and Comprehensive Obstetric Care • Ensuring that ambulance services are available for transportation to APHCs and referral to PHCs and CHCs • Developing a pool of skilled births attendants for each block. • IMNCI Training for ASHAs and ANMs • Improving accessibility of skilled birth attendants to communities • Creating community level awareness on the importance of assisted and institutional deliveries through ASHAs • Counseling of mothers and families for early initiation of breastfeeding, colostrum feeding and exclusive	**Strengthening facilities for institutional deliveries (please see facilities section)** • Ensuring availability of fully functional and equipped labour rooms, maternal wards, ambulance services and blood storage facilities • Equipping 24*7 APHCs and PHCs to provide minimum 24 hours post delivery stay to mothers and newborns by setting up maternity and neonatal wards • Equipping CHCs, SDH and DH to enable 48 hrs of post delivery stay for mothers and newborns by setting up maternity and neonatal wards • Ensuring availability of required medical officers, nurses and ANMs at all facilities • Appointment of Paediatricians and Gynaecologists at every PHC and CHC • Regular stocks of PPH controlling drugs. **Ambulance services** • Identifying ambulance service providers for 15 APHCs, 10 PHCs, 1 SDH and 1 DH and signing contracts for services • Focus on increasing exemption to BPL patients in the utilization of ambulance services **Developing a pool of Skilled Birth Attendants for each block** • Regular rounds of SBA training for ANMs, LHVs and Nurses.(see training section) • ASHAs to have the names and numbers of skilled birth attendants for every block • Extending the Helpline 102 to	**Mobile phones** 212 ANMs*Rs2000/mobile phone instrument=Rs.4,24,000.00 **Monthly mobile bills** 212 ANMs*Rs600/month*12months=Rs.7,63,200.00 **Facility level phones** 12 Facilities*Rs1000/phone =Rs.12,000.0 **Landline bills** 12 Facilities *Rs500/month*12 months= Rs.72,000.00 **Telephone directory of SBAs for ASHAs** Rs.50,000.0 **Printing JBSY cards** Rs.100,000.0 **JBSY payments** **Rural:** Rs2,000/beneficiary *15, 000 deliveries estimated= Rs.3,00,00,000.00 **Urban:** Rs 1000/beneficiary* 2000 deliveries estimated= Rs.2,000,000.00

breastfeeding for 6 months by ASHAs • Weighing of all newborns by ASHAs and AWWs at the community level within 48 hours • Ensuring timely payment of JBSY funds to mothers and ASHAs • Setting up a Sick Newborn Care Unit at the District Hospital • Ensuring telephone connectivity between all facilities providing institutional delivery care	enable calling for skilled birth attendants during deliveries **Accessibility of skilled birth attendants** • Providing mobile phones to ANMs at Sub centre to enable them to be available for assistance during delivery at the community level **IMNCI Training for all ASHAs and ANMs** • IMNCI training for all ASHAs and ANMs **EmOC Training** • EmOC training for all MOs and Grade A Nurses at PHCs and CHCs **Improving communication between facilities providing institutional delivery services** • Ensuring that 15 APHCs, 11 PHCs, 1 SDH and 1 DH are connected through functional phone lines **JBSY** • Creating a JBSY card which combines the services in the MCH card along with info on JBSY payments • Streamlining JBSY money from district to PHC to provide timely payment to beneficiaries and ASHAs. • Support ASHAs to open accounts in the bank. • Explore the options of direct money transfer to ASHAs' accounts. **Counseling and support to new mothers for initiation of the breast feeding after one hour of delivery, colostrum feeding and post natal care within 48 hrs**. • ASHAs to visit newborn baby in first 48 hours to ensure exclusive breast feeding and counsel the families about	

	newborn care and postnatal care. • ANM and staff at facility to provide counseling and support for exclusive breast feeding. • Each mother to receive a post natal check up before discharge • Postnatal follow up by ASHAs and ANMs at the village level **Sick Newborn Care Unit** • Setting up a Sick Newborn Care Unit at the District Hospital	
Other services	• Weekly RTI/STI clinics to be held at all PHCs with OBG visits during these days • Monthly RCH camps at distant villages, Doctors and OBG specialists • Deputing health workers MOs, SNs/ANMs from PHC, three other staff. • Procurement of drugs from the district drug house following the requisition of separate drugs for 12 camps.	One OBG contracting in daily basis @ Rs.500.0 * 4 days*12 months *11 PHCs = Rs.264,000.00 Two OBG/pediatrician contracting in per camp @ Rs.1000.0 * 12 camps * 15 APHCs= Rs.1,80,000.00 Cost of each camp @ Rs 5000*12 months*15 APHCs = Rs.9,00,000.00 Drugs for each camp @ Rs 2000*12 months*15 APHCs = Rs.3,60,000.00

The objective of RCH is to contribute to increasing availability, access and utilization of quality reproductive health services induce positive behavior change among women, men and adolescents and improve their reproductive health. Cost-effective approaches will be developed to reduce maternal mortality, through strengthening of referral networks and improving access to quality services for emergency obstetric care. Community outreach capacities of NGOs, PRIs and community-based organizations will be strengthened to increase the use of and access to quality reproductive health services. The

availability of different contraceptive methods will be expanded through community-based distribution and social marketing initiatives.

Behavioral change and communication programmes for men, women and adolescents will be developed. Male participation based on gender equality and equal responsibility for sexual and reproductive health will be promoted. The services at facility will include following points:

1. Advance Safe Motherhood through Human Rights

Defining maternal death as a "social injustice" as well as a "health disadvantage" obligates governments to address the causes of poor maternal health through their political, health and legal systems. International treaties and national constitutions that address basic human rights must be applied to safe motherhood issues in order to guarantee all women the right to make free and informed decisions about their health, and access to quality services before, during and after pregnancy and childbirth.

2. Empower Women : Ensure Choices

Maternal deaths are rooted in women's powerlessness and their unequal access to employment, finances, education, basic health care, and other resources. These realities set the stage for poor maternal health even before a woman becomes pregnant, and can worsen her health when pregnancy and childbearing begin. Legal reform and community mobilization is essential for empowering women to understand and articulate their health needs, and to seek services with confidence and without delay.

3. Safe Motherhood is a Vital Economic and Social Investment

All national development plans and policies should include safe motherhood programs, in recognition of the enormous cost of a woman's death and disability to health systems, the labor force, communities and families.

Additional resources should be allocated for safe motherhood, and should be invested in the most cost-effective interventions (in developing countries, basic maternal and newborn care can cost as little as US$3 per person, per year).

4. Delay Marriage and First Birth

Pregnancy and childbearing during adolescence can carry considerable risks. To delay first births, reproductive health information and services for married and unmarried adolescents need to be legally available, widely accessible, and based on a true understanding of young people's lives. Community education must encourage families and individuals to delay marriage and first births until women are physically, emotionally and economically prepared to become mothers.

5. Every Pregnancy Faces Risks

During pregnancy, any woman can develop serious, life-threatening complications that require medical care. Because there is no reliable way to predict which women will develop these complications, it is essential that all pregnant women have access to high quality obstetric care throughout their pregnancies, but especially during and immediately after childbirth when most emergency complications arise. Antenatal care programs should not spend scarce resources

on screening mechanisms that attempt to predict a woman's risk of developing complications.

6. Ensure Skilled Attendance at Delivery

The single most critical intervention for safe motherhood is to ensure that a health worker with midwifery skills is present at every birth, and transportation is available in case of an emergency. A sufficient number of health workers must be trained and provided with essential supplies and equipment, especially in poor and rural communities.

7. Improve Access to Quality Reproductive Health Services

A large number of women in developing countries do not have access to maternal health services. Many of them cannot get to, or afford, high-quality care. Cultural customs and beliefs can also prevent women from understanding the importance of health services, and from seeking them. In addition to legal reform and efforts to build support within communities, health systems must work to address a range of clinical, interpersonal, and logistical problems that affect the quality, sensitivity, and accessibility of the services they provide.

8. Prevent Unwanted Pregnancy and Address Unsafe Abortion

Unsafe abortion is the most neglected – and most easily preventable – cause of maternal death. These deaths can be significantly reduced by ensuring that safe motherhood programmes include client-centered family planning services to prevent unwanted pregnancy, contraceptive counseling for women who have had an induced abortion, the use of appropriate technologies for women who experience abortion complications, and, where not against the law, safe services for pregnancy termination.

9. Measure Progress

Maternal mortality is difficult to measure, due to problems with identification, classification and reporting. Therefore, safe motherhood partners have developed alternative means for measuring the impact and effectiveness of programs; for example, by recording the proportion of births attended by a skilled health provider. These indicators can identify weaknesses and suggest programmatic priorities so that maternal deaths can be better prevented in the future.

10. The Power of Partnership

Reducing maternal mortality requires sustained, long-term commitment and the inputs of a range of partners. Governments, non-governmental organizations (including women's groups and family planning agencies), international assistance agencies, donors, and others should share their diverse strengths and work together to promote safe motherhood within countries and communities and across national borders. Programs should be developed, evaluated and improved with the involvement of clients, health providers and community leaders. National plans and policies should put maternal health into its broad social and economic context, and incorporate all groups and sectors that can support safe motherhood.

TECHNICAL INTERVENTIONS TO ACHIEVE GOALS:

Key technical interventions to achieve goals include:

MATERNAL HEALTH

Antenatal Coverage

Facility level

- Have a fixed day and time at PHC and Sub Centres for conducting ANC clinics.
- Have a regular mobile team visiting difficult / remote areas on fixed day and time.
- Identify and involve private practitioners in ensuring ANC checkups, link up with Vandematram scheme.

Community Level

- Social mobilization to create demand in the community for ANC clinics
- Use local resources in terms of Gram Mitra, ASHA, TBA, link couples, Panchayat members to inform the ANMs about teenage pregnancy an first time pregnancy
- BCC in the community on the importance of seeking timely ANC.

Intranasal Care

Facility level

- Ensure availability of contractual staff nurses at the facilities for 24 hours PHCs.
- Strengthen FRUs and CHCs for C/BEmOC services.
- Provision for comprehensive emergency obstetric care services in FRUs.
- Ensure access to safe blood services for all FRUs.
- Identify and link with private practitioners, grants in aid hospitals and Trusts hospitals, especially in tribal areas and urban slums, for basic and comprehensive emergency obstetric care services especially for BPL families

Community Level

- Promote community mobilization through BCC by community based organizations, link couples and IEC.
- Ensure linkages for referral transport.
- Increase awareness in the community on the need to minimize the three delays for obstetric care.

Postnatal Care

Facility level

- Monitoring of ANM and LHV home visits especially for post natal care.
- Link up the AWW along with the ANM to use IMNCI protocols and visit neonates and mothers within three days and six weeks for delivery.

Community Level

- Involvement of Dais and CBHVs in PNC.
- Undertake BCC among women on the need of contacting health personnel after home delivery.

Safe Abortion Services

Facility level

- Ensure availability of MTPs in all FRU, CHC and 50 percent of PHCs.
- Encourage private practitioners to get their facilities recognized for providing MTP services.
- Use of private facilities for MTP training.
- Promote culture of counseling among the providers.
- Promote the use of MVA technique and medical abortion.
- Grass root workers to be strengthened in MTP counseling.

Community Level

- Disseminate information regarding the legal status of MTP and its availability.

Prevention and Treatment of RTI/STIs

Facility Level

- Training of medical officers, ANM/LHV, lab technician for diagnosis and treatment of RTI/STI
- Ensure availability of drugs, lab testing kits and equipments for RTI/STI services
- Network with private practitioners and Trust hospitals for the services in especially difficult and remote areas

Community Level

- Promote awareness regarding causes, prevention and early treatment seeking behavior for RTI/STI.

B. Child Health

Objectives

- Ensuring that 50% of children (0-6 months old) are exclusively breastfed
- Increase in percentage of children (12-23 months) fully immunized (BCG, 3 doses of DPT, Polio and Measles) from 50% to 70%
- Ensuring initiation of complementary feeding at 6 months for 50% of children
- Increasing the percentage of children with diarrhea who received ORS from 43% to 70%
- Increasing the percentage of children with ARI/fever who received treatment from 77% to 100%
- Ensuring monthly health checkups of all children (0-6 months) at AWC
- Ensuring that all severely malnourished children are admitted, receive medical attention, and **are nutritionally rehabilitated.**

Nutrition		
Situation Analysis: Ensuring exclusive breastfeeding and timely initiation of complementary feeding is critical for appropriate child development		
Strategies	Activities	Budget
• Counseling mothers and families to provide exclusive breastfeeding in the first 6 months • Identification of severely undernourished children (Grade III & Grade IV) through monthly health checkups at AWC. • Setting up a Nutrition Rehabilitation Centre at SDH Buxar	• Training by Health Department of crèche workers on nutrition and child care • Organizing health checkups at AWC for children in the 0-6 year age group on the 2nd Monday of every month • Referral of severely undernourished sick children to Nutrition Rehabilitation Centre (NRCs) • Setting up 10 bedded NRCs at SDH Buxar • Providing food and wage loss support for one parent of every child admitted to enable the child to stay at the NRC for the required period of time	**NRC setting up** 1 SDH*Rs.30,000.00= Rs.30,000.00 **NRC Staff** 3 Staff Nurses*Rs.7500/month*12 months*1 SDH= Rs.270,000.00 **Kitchen equipment** 1 SDH*Rs.5,000.00= Rs.5,000.00 **Kitchen expenses(including salary of cook)** 1 SDH*Rs12,000.0/month* 12months= Rs.144,000.00 **Wage loss compensation** 1 SDH*Rs90/day*30days* 12 months=Rs.32,400.00
Health Services		
Situation Analysis: Only 43% children with diarrhea received ORS whereas 23% of children with acute respiratory infection/ fever did not receive any medical attention		
Strategies	Activities	Budget
• Promotion of health seeking behavior for sick children through BCC campaigns. • BCC for pregnant women and mothers to regarding feeding practices, immunization, and	• Training of ANM and AWW for IMNCI • Training ASHAs to refer sick child to facility in case of serious illness. • ASHAs equipped to provide ORS to children with diarrhea and suggest referral in case of	IMNCI training (pls refer to training section for details) **ASHA Drug Kit** 1273 ASHAs*Rs600/kit= Rs.7,63,800.00 **Weighing machine** 1403 AWWs*Rs.1000/machine= Rs.14,03,000.00

other aspects of child care. • Capacity building of ASHA, AWW and ANM for the management of common childhood diseases and identification of serious cases for referral.	emergency. • Regular stock up of ASHA drug kits. • Providing weighing machines to every AWC to ensure monthly weighing • ASHAs to support AWWs in monthly weighing	

Health Services – Immunization

Situation Analysis: According to DLHS 3, percentage of children (12-23 months) fully immunized (BCG, 3 doses each of DPT, Polio and Measles) is only 50.0%. The immunization coverage has increased from 43.4 which was DLHS 2 figure, however much improvement is still required. As per DLHS 3, percentage of children who received BCG vaccine is 88.5%, percentage of children who received 3 doses of polio vaccination is 62.4%, children who receive 3 doses of DPT is 62.8%, and children who receive measles vaccine is 71.9%. Children who received at least one dose of vitamin A is 63.9% while those who received three doses of Vitamin A is 22.8. The District currently faces a shortage of skilled vaccinators.

Muskhan EK Abhiyan: Immunization of all pregnant women for T.T. and children up to one year (full immunization)

All 1403 AWCs are to be covered under this programme at least once a month. 161+109 HSCs are to be covered under this programme on all Wednesdays observed as immunization day. APHCs will also provide immunization services on Wednesday and all days in PHCs/CHC/SDH and SH. Incentives are provided under this programme for AWW, ANM and ASHA when 80 per cent immunization is achieved. The programme involves organizing Mahila Mandal camps at the AWCs.

Many ANMs in the district are not proficient in administering the vaccines. Skills level of ANMs is low. Routine immunization training has not been taking place on a regular basis. 453 participants need to be trained in Routine Immunization in batches of 30. There is a shortage of cold chain equipment such as ILR and deep freezer at PHC level. 4 newly functional PHCs in the district Chousa, Chakki, Kesath and Chougai do not have ILR and deep freezer. Most of the PHCs are operating with either ILR or deep freezer.

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The District has also not received vaccine funds from April 2008. Buxar gets vaccines from WIC, Patna. The District does not have a vaccine van which obstructs timely supply of vaccines to the district. DPT and needle supply is not timely. The maintenance and repair of cold chain equipment is not being done properly by the company currently appointed. The District also needs to adopt better waste

management practices for the disposal of syringe and needles. Funds for Printing of RI formats are underutilized.		
Strategies	Activities	Budget
• Improving availability of skilled vaccinators. • Increasing utilization of immunization services through awareness generation by ASHAs and AWWs. • Ensuring continued tracking of pregnant women and children for full immunization • Establishing sound monitoring mechanism to review and guide the progress • Improving availability and maintaining quality of cold chain equipment • Improving timely supply of the vaccines • Timely supply of DPT and syringes. • Discussion with the state to acquire power of issuing maintenance and repair contract for cold chain equipment from district. • Adopting safe	• Organizing regular routine immunization training for ANM and AWW and IPC/IEC/BCC trainings for ASHA and AWWs. • Organizing immunization camps at every Sub centre level on every Wednesday and at the AWCs on every Saturday. • Regular house to house visits for registration of pregnant women for ANC and children for immunization • Developing tour plan schedule of ANM with the help of BHM and MOIC. • Timely payment to MOICs to arrange transportation of vaccines from district hospital to PHCs. • Regular disbursement of funds from the DIO to MOs for providing incentives to ANMs • Regular disbursement of funds for ANMs to provide incentives to AWWs and ASHA workers • Providing per diem for health workers,	**Incentives for AWWs** 1403 AWWs @ Rs.200.00*12 months = Rs.33,67,200.00 **Incentives for ANMs** 1403 (AWC visit by ANM) @ Rs 150.00*12 months = Rs.25,25,400.00 **Incentives for ASHAs** 1403 (AWW visit by ASHA)@ Rs 200.00*12 months = Rs. 33,67,200.00 **Mahila Mandal Meetings** 1403 (Mahila mandals) @ Rs.250.00*12 months = Rs.42,09,000.0 **Training** Honorarium and TA for participants @ Rs 250 for two days = Rs.113,250.0 Honorarium for trainers @ Rs. 600 for two days training = Rs. 27,000.0 Contingency Rs.100/day = Rs.90,600.0 Budget for print material included with the hand bill in the section of maternal health.

disposal policies for needles and syringes	mobilizes, supervisors and vaccinators and alternative vaccinators • Maintaining the disbursement records • Visits by MOIC, CDPO, BHM, LHV and health educator to monitor the progress of immunization schedule and prepare report. • Ensuring the unrestricted movement of the monitoring team with fuel for vehicle and funds for hiring of the vehicle. • Maintaining continuous power supply at PHC level for maintaining the cold chain. • Applying for acquisition of ILR and deep freezer for the 3 PHCs which do not have ILR at present • Applying to State Heath society for the funding for Vaccine van to get timely stock of vaccines for the districts. • Timely and regular requests from district to state as well as blocks to district to replenish the supply of DPT and syringe.	

	• Rationalization of courier rates and making request to the SHS for increased funding for courier in order to ensure timely supply of vaccines to sub centres. • Reviewing the contract of Kalka Cooling Company, currently responsible for repair and maintenance. • Submitting a proposal to the state health society to acquire power of issuing maintenance and repair contract for cold chain equipment from district. • Procure stock of hub cutters for all the PHCs for safe disposal of needles and syringe.	

Vitamin A Supplementation Programme-

The programme faces lack of skilled manpower for implementation of program. There is also shortage of drugs and RCH kits. The shortages put constraints on ensuring first dose of Vitamin-A along with the measles vaccination at 9 months. There are also problems for procurement of Vitamin-A bottles by the district for biannual rounds. The reporting mechanisms of the district need to be improved. There is lack of coordination among health & ICDS workers for report returns & MIS. The district also needs a joint monitoring & supervision plans with ICDS department.

Strategies	Activities	Budget
• Updation of Urban and Rural site micro –plan before each round.	• Orientation , stationary, data compilation, validation and updating • Constituting	Prientation of 11 PHCs + 1 urban centre=12*1000=Rs.12,000.00 Constituting district level task force- 1*5000=Rs.5000.00

• Improving inter-sectional coordination to improve coverage. • Capacity building of service provider and supervisors. • Bridging gaps in drug supplies. • Urban Planning for Identification of Urban sites and urban stakeholders. • Human resource planning for Universal coverage. • Intensifying IEC activities for Community mobilization. • Strengthening existing MIS system and incorporating 9 doses of Vitamin-A in existing reporting structure. • Strong monitoring and supervision in Urban areas.	district level task force and holding regular meetings • Organising meeting of block coordinators • Training and capacity building of service providers. • Strategy planning meetings, orientation of stakeholders, resource planning and site management for urban centre and orientation of urban supervisors. • Ensuring availability of immunization cards • Procurement of Vit A Syrup	Training of 11 PHCs*Rs1500= Rs.16500.00 12 centres*Rs.5000=Rs.60,000.00 Strategy planning workshops- Rs. 7500.00 Honorarium to urban vaccinators =250 * 100= Rs. 25,000 Honorarium to ASHAs and AWWs- 2676 health workers*100= Rs.267600.00 Honorarium to supervisors- Rs.14,400.00 Immunization cards- Rs.120,000.00 Procurement of Vit A Syrup- Rs.463,424.00 Hiring vehicle for campaigns – Rs.36,000.00 IEC/ BCC activities-Rs.60,000.00 Vehicle support for monitoring- Rs.72,000.00 Total budget for two biannual round- Rs.11.27,924.00*2=**Rs.22,55,848.00**

Facility Level

- Provide new born carte at community and facility level.
- Promote the concept of early and exclusive breastfeeding, warmth and prompt care seeking for newborns.
- Implement program for managing ARI and diarrhoea.
- Support for the polio eradication efforts of the state.
- Special outreach immunization clinics in difficult areas.
- Link up with private practitioners and trust hospitals for new born & critical new born care.
- Implementation of IMNCI.
- Operationalise NNC units in FRUs.

Community Level

- Link up with AWWs to provide IMNCI care.
- BCC for promoting newborn care, exclusive breastfeeding and complementary feeding.

C. Family planning

Objective

- Fulfilling unmet need of 35% for family planning services at the community level
- Increasing the use of any modern method of family planning from 35% to 50%
- Increasing male sterilization rates from 0.5% to 2%
- Increasing the utilization of condoms as the preferred choice of contraception from 2.7% to 8%.

Situation Analysis: The utilization of any method of contraception has increased a bare 2 percentage points in the district over the past five years whereas the utilization of modern methods has increased from 28% to 35%. Of this, nearly 30% is contributed by female sterilization. Male sterilization is low at 0.5%. Other spacing methods are equally low with the use of IUD at a mere 0.6%, oral contraceptive pills at 1.8% and condoms at 2.7%. A significant unmet need for family planning services has been recorded at 37% which importantly comprises of 13% need for spacing and 24% for limiting methods.		
Strategies	Activities	Budget
• IEC/BCC at community level with the help of ASHAs, AWW • Addressing complications and failures of family planning operations • Training male	**Spacing methods** • Selecting and training male peer educators (1 for every 500 persons) in 5 blocks to counsel men for the adoption of spacing methods • Interpersonal	**Training of Male Peer Educators** 40 batches (25 educators in each batch trained for 3 days)*Rs3000.00/batch=Rs.120,000.00 **Incentives** For 2000 NSVs @ Rs 1500 = Rs.3,000,000.0 For 20,000 tubectomies @ Rs 900= Rs.18,000,000.0

peer educators to increase awareness amongst men about the importance of contraception and the ease of spacing methods • ASHAs to have a stock of contraceptives for distribution	counseling of eligible couples on family planning choices by ASHAs and male peer educators **Limiting methods** • Family planning day at all health facilities every month. • ANM and ASHA to report complications and failure cases at community to facility. • Quick facility level action to address complications and failures. • Streamlining compensation channels • Streamlining incentives for MOs **Abortion services** • MTP services to be provided at all PHCs. **Training** • Training of MOs for conducting tubectomy and vasectomies procedures using Laparoscopy • Training of MOs for providing MTP services • Training of ANMs on encouraging reproductive choices and the features of different methods • Training of ASHAs	For 80,000 IUD insertions @ Rs 20 per case= Rs.1,600,000.0

	on family planning choices, contraceptives and behavior change communication	

FAMILY PALNNING

Facility Level

- Promote accessibility to spacing methods and emergency
- contraceptive.
- Develop at least one facility in each block to provide all FP services
- including terminal methods on a regular basis.
- Promote the use of 380 A – IUD as an alternative to sterilization.
- Popularize NSV.
- Monitoring and supportive of ANM/LHV to ensure that follow up
- services are being provided.

Community Level

- Increase male involvement in the use of contraceptive and motivate
- them for NSV.
- Use local resources in the villages such as the link couples s depot
- holders.
- Use link couples for promoting the use of contraceptives.

D. Adolescent Reproductive & Sexual Health

Objectives

- Reducing the percentage of births to women during age 15-19 years from 96% to 85%
- Reducing anaemia levels in adolescent girls and boys

Situation analysis: Nearly 96% of births are to women in the age group of 15-19 years. This is a very vulnerable age group deserving of special attention and support.		
Strategies	Activities	Budget
• Providing life skills education to married and unmarried adolescent girls by ASHAs and AWWs • Treating anemia among adolescent girls and boys	• Training of ASHAs and AWWs on providing life skills education to adolescent girls • Screening of all adolescents especially girls for anemia during the	RTI/STI Screening budget included in the RCH camp **Anaemia Screening** 1403 AWCs*Rs500.00*12month = Rs.8418000.00

	monthly health checkups of children at AWC on the 2nd Monday of every month • Screening of all adolescents for RTIs and STIs • Providing IFA supplementation to adolescents	**IFA supplements** Rs.100,000.00
School Health Programme		
Situation Analysis: There are about 339 government middle schools where the camps are conducted in which total of 191828 children are pursuing their study. Initially we shall start with 60 children in a camp for whole day. A sum of about 3197 camps shall be organized by the selected NGOs. The services provided include refraction, general check up, and distribution of medicines.		
Strategy	Activity	Budget
• Continuing the school health programme • Initiation of School Health Programmes in Primary/high school • Ensuring proper referral and follow-up of students	• Requisition to be sent to the state health society for expanding the school health programme to priamy and high school of government schools. • School Health programmes to be conducted through partnership with NGOs • Requisition to state for providing spectacles for refractive corrections • Providing referral cards for the needy children to the nearest PHC/SH • Providing an award for the 'Healthiest' school in the block	1. For 3197 camps @ Rs 4800 per camp =Rs.1,53,45,600.00 2. Rs 10,000 per block for healthy school award *11 blocks =110,000.0

ADOLESCENT HEALTH

Provision of Adolescent Sexual and Reproductive Health services/ information

Facility Level

- To train health personnel on reproductive health needs of adolescents and make the services available to them.
- Create enabling environment for adolescents in the health facilities.
- Provision of AFHS in PHCs and CHCs.
- Referral services.

Community Level

- Community education for ASRH issues.
- Use local resources to create sensitivity regarding the reproductive health needs of adolescents.
- Increase awareness among adolescents on reproductive health issues.
- Use NGOs and other local groups to reach out to the adolescent.

Certain cross cutting issues emerged which need intervention at the State level viz., IEC, gender, advocacy, HRD, inter-sectoral coordination. In addition to this, special focus is also proposed to reach the tribal and urban slum population to ensure equity. This phase of the project a lot of emphasis will be laid on advocacy, BCC, public private partnership with convergence and coordination. Accordingly, all the related departments - women and child development, Panchayat, rural development, urban development, youth affairs, SACS have been sought at the state and district level intervention. To achieve the above set of goals, institutional strengthening and need based training at different levels will be undertaken. Program management units developed at the district level for the monitoring and evaluation of the project.

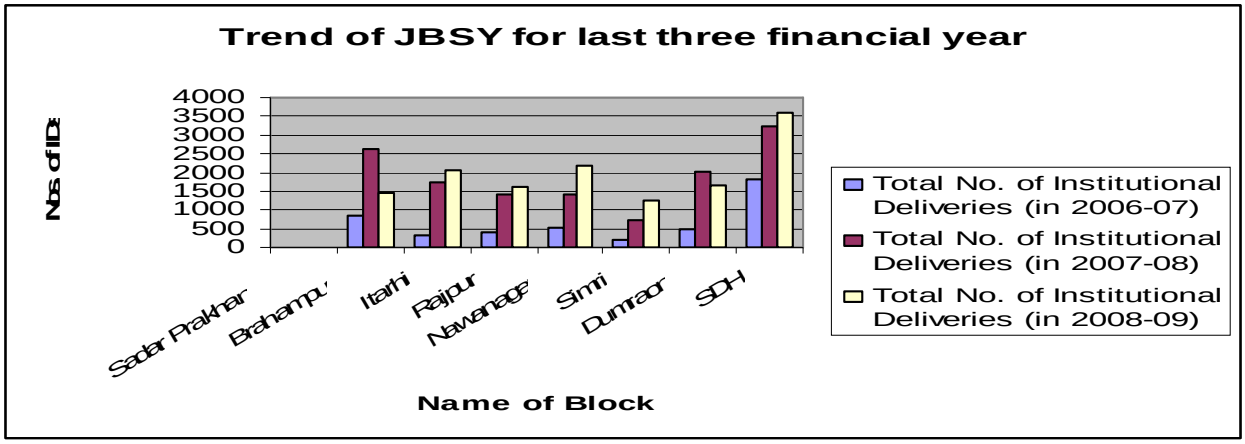
The public health system at present does not adequately address the adolescent sexual and reproductive health issues due to various reasons. There are no clear policies governing how health service providers should serve adolescents. Existing protocols do not state clearly how adolescent rights; confidentiality and privacy issues should be protected. At PHC level, RH services are not organized to cater to the needs of adolescents. Service providers need orientation and sensitization on ASRH issues. The health data systems does not have enough provision for providing information on adolescents segregated by age and sex data, which makes it very difficult to monitor the utilization of health services especially by adolescents. Referral mechanisms from one level to another level of service delivery are not organized and networking between institutions for addressing adolescent reproductive health needs strengthening.

Services Trends of Buxar district:

Deliveries Registration:

Block wise

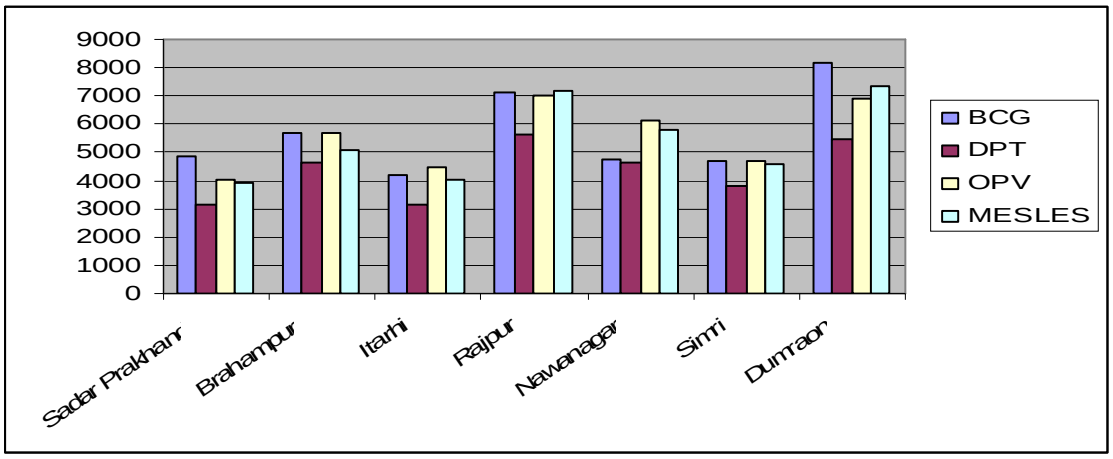
Sl. No.	Name of PHCs	Total No. of Institutional Deliveries (in 2006-07)	Total No. of Institutional Deliveries (in 2007-08)	Total No. of Institutional Deliveries (in 2008-09)
1	Sadar Prakhand	0	0	0
2	Brahampur	856	3627	1443
3	Itarhi	304	1753	2054
4	Rajpur	420	1427	1603
5	Nawanagar	542	1420	2180
6	Simri	189	708	1267
7	Dumraon	495	2009	1648
8	SDH	1805	3249	3613
	TOTAL	4611	14193	13808



Child Health:

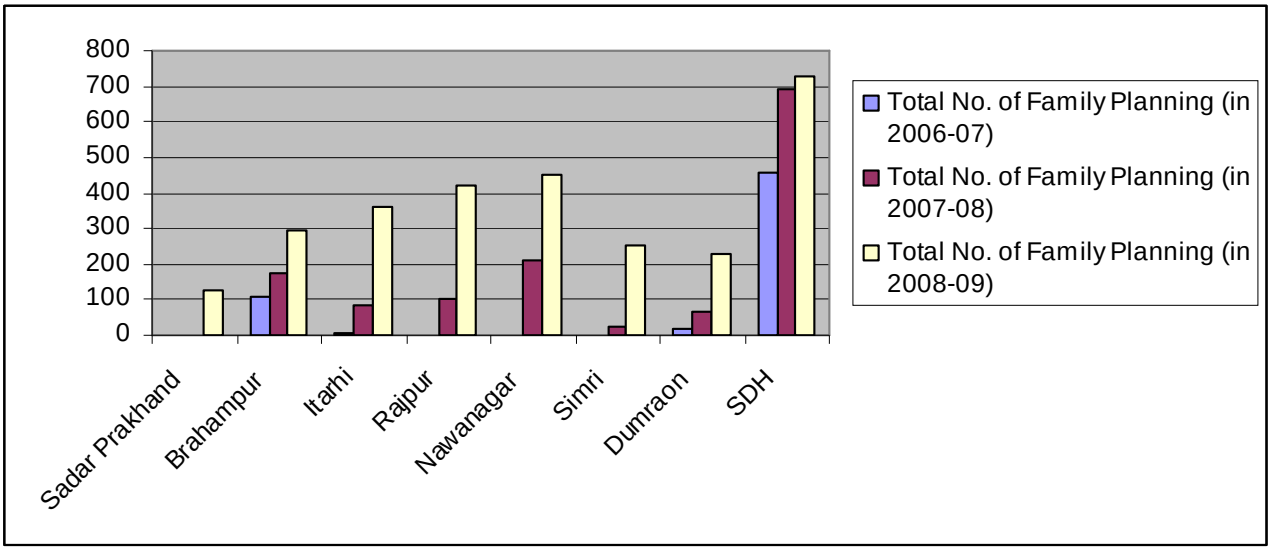
The Child health care is one of the important components of RCH program. Complete immunization, diarrhea management, pneumonia management are some of the important indicators of child health care. In Buxar district, full immunization is 38540 in the financial year 2008-09 which is much more than the previous one. In Buxar district the health functionaries are working properly due to strong liasioning of district officials and block officials. But there must be the scope of improvement which is very important. The data of Buxar district in the financial year 2008-09 for immunization BCG, DPT, OVP, MEASLES are shown below:

Sl. No.	Name of PHCs	BCG	DPT	OPV	MESLES
1	Sadar Prakhand	4876	3121	4056	3897
2	Brahampur	5675	4637	5660	5085
3	Itarhi	4193	3120	4447	4051
4	Rajpur	7111	5657	7027	7163
5	Nawanagar	4765	4628	6153	5816
6	Simri	4716	3826	4713	4600
7	Dumraon	8164	5454	6906	7325
	TOTAL	40478	31132	39873	38540



Block wise data of Family Planning:

Sl. No.	Name of PHCs	Total No. of Family Planning (in 2006-07)	Total No. of Family Planning (in 2007-08)	Total No. of Family Planning (in 2008-09)
1	Sadar Prakhand	00	00	127
2	Brahampur	111	174	296
3	Itarhi	07	85	361
4	Rajpur	02	105	419
5	Nawanagar	00	209	451
6	Simri	00	27	251
7	Dumraon	16	67	230
8	SDH	459	692	725
	TOTAL	595	1359	2860



National Aids Control Programme :-

The National AIDS Control Program was started with a view to create awareness among population regarding the disease & to reduce the prevalence rate & the incidence rate of the disease.

Performance of VCTC Buxar

The number of patients, which had, came for getting tested for HIV & those who have been found reactive both are showing an increasing trend. But last year reactive cases are increased. The increase in number of patients turning up for HIV test shows increase in awareness among the masses about the disease & it also shows that there has to be more & more centers for counseling & testing. At present the district has one VCTC center at Buxar Sub Divisional Hospital. The workload on the only counselor at the center is huge & the district being very large with blocks at a distance of around 40-45 kms also shows the demand for more & more VCTC centers. The increasing number of reactive patients also creates demand for special care for positive patients; as such there are no centers at the district providing specialist care to the positive patients.

SOCIO-CULTURAL & ECNOMIC INDIACTORS:--

Particulars	BUXAR
Percentage of girl's marrying before completing 18 years	49.8 %
No. of sub-center functioning	161
No. of PHCs functioning	09
Percent of eligible couple using any modern method	53%
Shortfall of health worker female/ANM	19.03 %
Number of sub-center without HW(F)/ANMs	00
Shortfall of Doctors at PHCs	38%

TRAINING :

Training plays vital role in accomplishment of the goals effectively. RCH-II program has made good progress in terms of translating service guidelines and giving program directions to districts. Service guidelines for BEmOC, FP, and IMNCI have been duplicated and made available to all the concerned staff. Professional development programs aimed at improving technical and managerial competencies of staff have helped in sustaining interest of the medical officers

thereby health systems capacity to deliver quality services. The number of the training given to health professionals is as mentioned below:

Vital indicators of the district:

Complete ANC is received by only 76 % of the women. 83% of the deliveries are taking place in the institution. Amongst these 62% of the deliveries are conducted in the private sector. Out of the total home delivery, 29% of the deliveries are assisted by skilled persons. Percentage of husbands aware about RTI/STI 60% and HIV/AIDS (85%) is slightly more than the women (RTI 60% and HIV/AIDS 85%). Out of the total pregnancies eight percent of the pregnancy has been lost of abortion, induced abortion constituting three percent. Percentage of women initiating breastfeeding on the same day within two hours of birth constitutes only 22%. 98% of the women have initiated breastfeeding only after three days. Full vaccination has been received by almost three fourth of the children (68%). All eligible women are aware about some or the other family planning method. However, knowledge on any modern spacing method is 80%. Percentage of couples currently using contraceptives is 60%. More than 60 percentages using permanent contributes, whereas spacing method is utilized by 80 percent.

SECTION – III

Mobile Health Care Unit

To reach out the marginalized communities living in far flung areas, the state has “108” Mobile health units (MMU) that are currently functioning in tribal, peri urban, difficult areas and earthquake affected areas. Some of these MMUs are equipped with patient examination facilities, basic lab facilities and have the ability to provide reproductive and health services, along with general health services. The mobile is staffed with one Medical Officer, one GNM (Gr. A), one ANM, one Lab Technician, one pharmacist, X-ray Technician, one OT assistant and one supervisor. Experiences show that the community living in remote and difficult areas better utilizes these services. These Mobile units would be re routed and Strengthened to provide basic health and RCH services in remote areas, which are so far not served or difficult to cover by sub centres. These MMU will be linked with Block Health Officers so that they can monitor the services. Provision for necessary drugs and consumable, POL and staff has been made available under this program. The guidelines, daily schedule and suggestive list of services that they need to provide will be given to them. A state level consultant has been made responsible to ensure that these services would increase RCH coverage in the marginalized communities. Periodic reviews of Mobile units are undertaken to strengthen the services. It has also planned to collect and analyze monthly performance each mobile units and coverage status

of the areas. Currently, all the three mobile health units in the district have been initiated and they are functional.

Urban Health

Urban health is an innovative approach to cover the un-served population. As till date the maternal and child health components were mainly concentrated in the rural areas, the urban sector remained un-served. There are sub-centers and PHC in the rural areas to provide health services. But in urban area there is no such system. Municipal Authorities is no providing health services, There the people are deprived of basic health facilities. Moreover, there is not such facility available to cover the un-served urban areas. With this objective urban health was initiated to cover the urban areas especially the urban slums.

As per the guidelines there is provision of one female health worker for every 2000 population. For the state a total of 998 female health workers have to be involved in the urban health program. They will carry out the same activity as performed in rural health programs. There is also provision of 62 Public Health Nurse to support primarily the urban health programs. But there is restriction that, for every 25000 population, it can be done so. The whole program is to be handled by urban health officer. There is provision of one urban health officer for every 50,000 population.

Action Plan for Urban Health Programs

Goal

To improve the health status of the urban poor community by provision of quality integrated (Primary Health Care Services)

Objective

- To provide integrated and sustainable system for primary health care services in the urban areas, with focus on urban poor living in slums and other vulnerable groups.
- Making all the Urban Health Centers functional through hiring of one Urban Health Officer. It is needless to mention that due to lack of officer it is difficult to monitor the activities performed by the CBHVs from the head quarter. We can strengthen the urban services by hiring retired BHOs or retired MOs on contractual basis. They will sit in the respective BHOs office and manage the programmes. They will monitor of the activities by the health workers.
- Capacity building of all the selected staff batch wise. Training is very important to build there capacity on regular basis. Training approach has to be participatory to enhance their communication skills. Post training assessment of the workers, if found in-effective replacement with other interested health worker.

- Monthly meeting of all selected leaders with UHOs. In addition monthly meeting of all the selected leaders in their own urban center with female health workers. After collection of all reports they will discuss health topics which will help in their development. The meeting has to be organized in each of the centers on regularly.
- DPHN and DIO/RCHO will arrange regular meeting with the workers to assess monthly progress on reproductive and child health issues and immunization. If required review meeting of Urban Health Officer with CDHO, ADHO, RCHO and DPMU team to fill up the identified gaps.

Village Health and Sanitation Committee

One of the core strategies of the NRHM is to empower local governments to manage, control and be accountable for public health services at various levels. The Village Health & Sanitation Committee (VHSC), the standing committee of the Gram Panchayat (GP) will provide oversight of all NRHM activities at the village level and be responsible for developing the Village Health Plan with the support of the ANM, AWW and Self Help Groups. Block level Panchayat Samitis will co-ordinate the work of the GP in their jurisdiction and will serve as link to the DHM. The DHM will be led by the Zila Parishad and will control, guide and manage all public health institutions in the district. States will be encouraged to devolve greater powers and funds to Panchayati Raj Institutions.

Untied grant of Rs. 10,000/- given in previous 2 year to all village health and sanitation committees. The committee will run in full coordination with AWW in the village. Integration with ICDS implies joint planning, use of AWC as the hub of the NRHM interventions in the village, joint reporting and monitoring on common indicators, and engagement with the AWW as a key figure in village planning and implementation.

PART – B

Action plan for NDCP

Action Plan for Tuberculosis Control (R.N.T.C.P.) Programme :-

Introduction :

Tuberculosis is an infectious disease caused by Mycobacterium tuberculosis. Pulmonary tuberculosis is the most common form of TB (more than 85% of all TB cases), while extra-pulmonary tuberculosis can affect almost any organ in the body. Transmission occurs by airborne spread of infectious droplets and droplet nuclei containing the tubercle bacilli. The source of infection is a person with sputum smear positive pulmonary TB. Transmission often occurs indoors, where droplets and droplet nuclei can stay in the air for a long time.

Implementation of RNTCP :

On the recommendations of an expert committee, a revised strategy to control TB was pilot tested in 1993. The RNTCP applies the WHO recommended DOTS (Directly Observed Treatment, Short-course) strategy. The programme was expanded in a phased manner to cover the entire country in 2005. By June 2005, over 1 billion of the population was covered under RNTCP. The majority of TB patients have pulmonary TB, with the sputum smear positive pulmonary TB patients constituting the infectious pool in the community. Early diagnosis and cure of these patients can break the chain of transmission of TB infection in the community; However, RNTCP provides treatment services to all patients including both pulmonary and extra pulmonary TB patients.

Goal :

The goal of RNTCP is to decrease mortality and morbidity due to TB and cut transmission of infection until TB cases to be a major public health problem. It aims to control TB by detecting and curing sputum smear-positive patients thereby interrupting the chain of transmission. The objectives of RNTCP are to achieve and maintain a cure rate of at least 85% among new sputum smear positive cases and to achieve and maintain detection of at least 70% of such cases in the population. The only effective means to achieve the goal of RNTCP is the application of DOTS.

Objectives :

The objectives of RNTCP are :

• To achieve and maintain a cure rate of at least 85% among newly detected infectious (new sputum smear positive) cases, and

• To achieve and maintain detection of at least 70% of such cases in the population

Components of DOTS :

DOTS is a systematic strategy having 5 components.

- Political and administrative commitment
- Good quality diagnosis, primarily by sputum smears microscopy
- Uninterrupted supply of good quality drugs
- Directly observed treatment (DOT)
- Systematic monitoring and accountability

Scientific basis of DOTS

DOTS is primarily based on sputum microscopy, domiciliary treatment, short course chemotherapy, and directly observed treatment.

Structure of the RNTCP

The Structure of RNTCP comprises of five levels, as follows:

National Level (Central TB Division)

The Central TB Division (CTD) is a part of the Ministry of Health and Family Welfare (MoHFW), and is responsible for tuberculosis control in the whole, country. A National Programme Manager, the Deputy Director General TB (DDG TB), is in charge of the tuberculosis programme for the entire country. CTD plans, supervises, monitors and evaluates programme activities throughout the country.

State Level

With the rapid expansion of the programme, MoHFW has re-structured and strengthened the functions of the State TB Control Society (STCS). The States have increases ownership and accountability for implementation. Capacity building and de-centralization are taking place in the technical, financial as well as logistic aspects of the programme. The States, via the STCSs, are now directly responsible for monitoring and supervising the work of District TB Control Societies (DTCSs). At the State level, the State Tuberculosis Officer (STO) is responsible for planning, training, supervising and monitoring the programme in their respective states as per the guidelines of the STCS. The STO bases at the State TB Cell is administratively answerable to the State Government and technically follows the instructions of the CTD, and coordinates with CTD and the districts for executing the duties mentioned above. There should be a full-time STO trained in RNTCP for each state. In major states of the country, a state TB Training and Demonstration Centre (STDC) supports the state TB Cell by providing training, supervision coordination, monitoring and technical functions.

District Level

The district is the key level for the management of primary health care services. The district level (or municipal corporation level) performs functions similar to those of the state level in its respective area. The Chief District Health Officer or an equivalent functionary in the district is responsible for all medical and public health activities including control of TB. The District Tuberculosis Centre (DTC) is the nodal point for TB control activities in the

district. In RNTCP, the primary role of the DTC has shifted from a clinical one to a managerial one. The District TB Officer (DTO) at the DTC has the overall responsibility of physical and financial management of RNTCP at the district level as per the guidelines of the DTCS. The DTO is also responsible for involvement of other sectors in RNTCP and is assisted by an MO, Statistical Assistant and other paramedical staff. For each district, there should be a full-time DTO, who is trained in RNTCP at a central level institution.

Sub-district Level (Tuberculosis Unit Level)

A team, comprising a specifically designated Medical Officer – TB Control (MOTC), Senior Treatment Supervisor (STS) and Senior Tuberculosis Laboratory Supervisor (STLS), is bases in a Community Health Centre (CHC), Taluka Hospital (TH) or Block Primary Health Centre (BPHC). The team of STS and STLS at the Tuberculosis Unit Level (TU level) are under the administrative supervision of the DTO/MO-TC.

The TU covers a population of approximately 5 lakhs (2.5 Lakhs in tribal, desert, remote and hilly regions). The TU will have one Microscopy Centre for every 1 Lakh population (0.5 Lakh in tribal, desert, remote and hilly regions) referred to as the Designated Microscopy Centre (DMC). DMCs are also provided in Medical Colleges, Corporate hospitals, ESI Railways, NGOs private hospitals, etc, depending upon requirements. The TU is responsible for accurate maintenance of the Tuberculosis Register and timely submission of quarterly reports to the district level. The TU is the nodal point for TB control activities in the sub-district. MOTC at the TU has the overall responsibility of management of RNTCP at the sub district level and is assisted by the STS and STLS. MO-TC is also responsible for involvement of other sectors in RNTCP. The MO-TC is trained in RNTCP at a state level institution, preferably State TB Training and Demonstration Centre (STDC).

The MO-TC at the TU is responsible for organizing sputum smear examination at all DMCs of the sub-district, carrying out treatment categorization of diagnosed patients (and supporting other MOs of the sub-district to do the same), and ensuring that DOT is taking place as per guidelines at all DOT centres. He should ensure a regular supply of drugs and other logistics and ensure their uninterrupted availability in all peripheral health institutions in the sub-district. MOTC is responsible for updating records and preparing quarterly reports on case finding, sputum conversion, results of treatment outcome and programme management of the corresponding TU.s

Key functions of the Tuberculosis Unit team are to

- Maintain the Tuberculosis Register
- Organize and ensure effective diagnosis and direct observation of treatment
- Prepare quarterly reports on case finding, sputum conversion, results of treatment, and programme management.
- Ensure adequate supply of drugs, reagents and logistics regularly
- Involvement of other sectors in RNTCP

• Ensure effective IEC activities

Peripheral Health Institutions (PHIs)

At this level are the dispensaries, PHCs, CHCs, referral hospital, major hospitals, and specialty clinics/hospitals (including other health facilities) within the district. Some of these PHIs will also be DMCs.

Main responsibilities of the MO at the PHIs

Refer tuberculosis suspects or send their sputum specimens to DMC for examination.

• Carry out treatment categorization of diagnosed patients; give health education to them; identify DOT providers for them (in consultation with the concerned workers as well as the patients) and start DOT within 7 days of diagnosis.

• Trace patients who interrupt treatment and bring them back to treatment. Maintain up-to-date Tuberculosis Treatment Cards and records and make them available to supervisory staff when they visit the health facilities.

• Monitor and facilitate follow-up sputum smear examinations.

• Identify and investigate contacts.

• Mention treatment outcomes in the treatment cards.

• Identify and train DOT provider as and when needed, update list of DOT providers under intimation to MO-TC.

• Submit monthly report on programme implementation and logistics to the TU.

• Supervise and monitor DOT services in their jurisdiction

• MOs of DMC are also responsible for supervision and monitoring the microscopy activities of their institution.

The central state, district and sub district levels must carry out their responsibilities to achieve the objectives of RNTCP.

The main tools for diagnosing

• **Sputum microscopy** is easy to perform at the peripheral laboratories, not expensive and specific with low inter and intra reader variation. Therefore, this is the key diagnostic tool used for case detection in RNTCP.

• **X-Ray as a diagnostic** tool is sensitive but less specific with large inter and intra reader variations.

• **Culture of Mycobacterium tuberculosis** bacilli is very sensitive and specific but is expensive as it requires a specialized laboratory set-up and results are available only after several weeks.

Definitions:

Type of Cases:

New : A TB patient who has never had treatment for tuberculosis or has taken anti-tuberculosis drugs for less than one month.

Relapse : A TB patient who was declared cured or treatment completed by a physician, but who reports back to the health service and is now found to be sputum smear positive.

Transferred in : A TB patient who has been received for treatment into a Tuberculosis Unit, after starting treatment in another unit where s/he has been registered.

Treatment after default : A TB patient who received anti-tuberculosis treatment for one month or more from any source and returns to treatment after having defaulted, i.e. not taken anti-TB drugs consecutively for two months or more, and is found to be sputum smear positive.

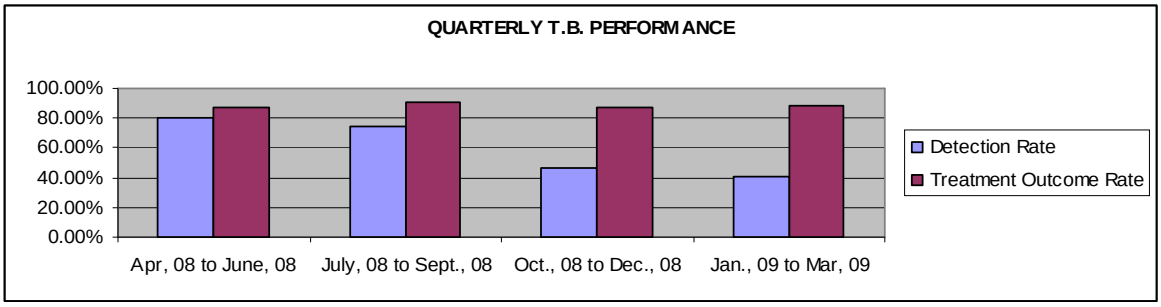
Failure : Any TB patient who is smear positive at 5 months or more after starting treatment. Failure also includes a patient who was treated with Category III regimen but who becomes smear positive during treatment.

Chronic: A TB patient who remains smear positive after completing a retreatment regimen.

Other: TB Patients who do not fit into the above mentioned types. Reasons for putting a patient in this type must be specified.

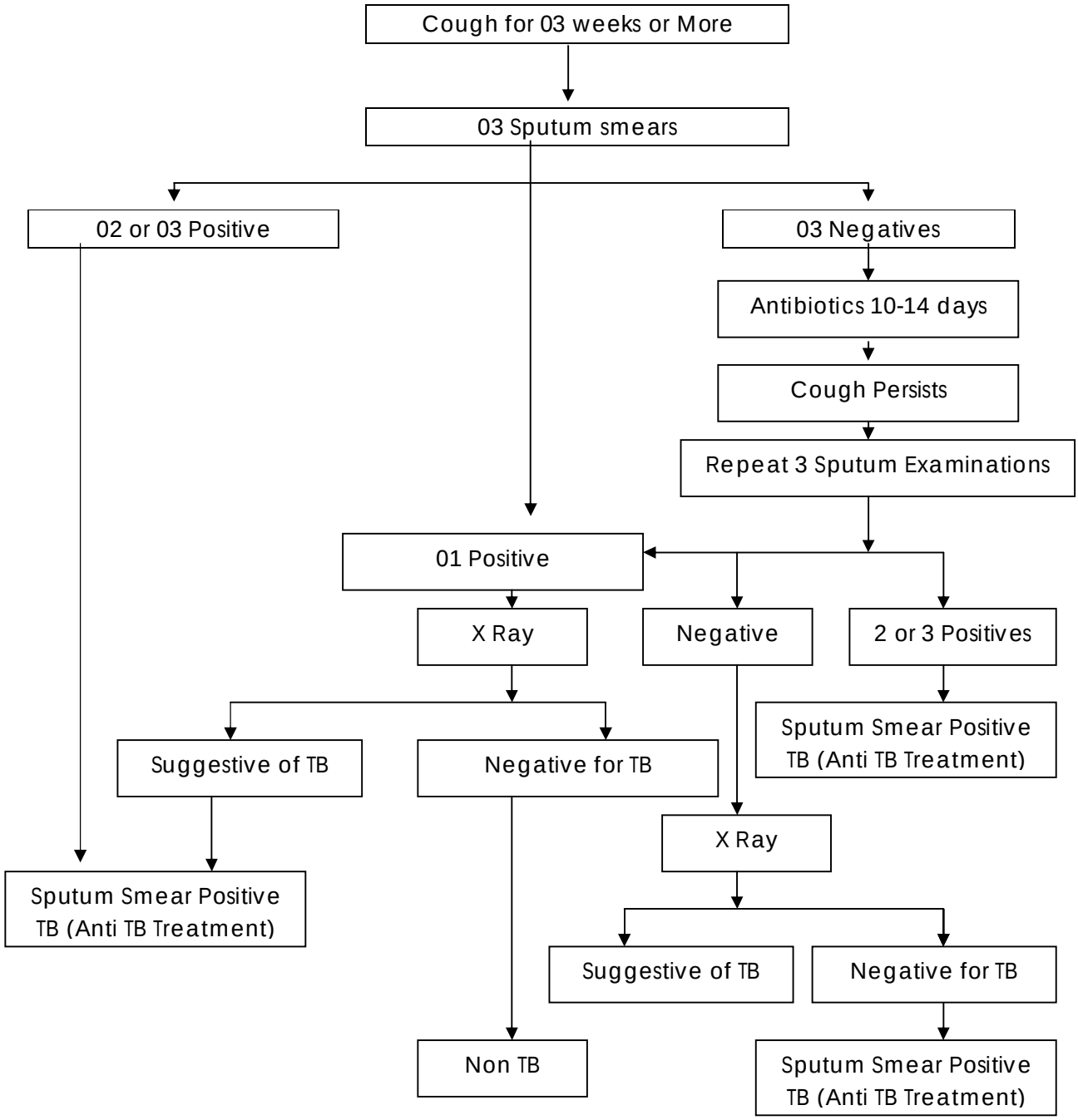
QUARTERLY T.B. PERFORMANCE IN LAST YEAR :

Quarter Case	Detection Rate	Treatment Outcome Rate
Apr, 08 to June, 08	80.77 %	86.79 %
July, 08 to Sept., 08	74.00 %	91.00 %
Oct., 08 to Dec., 08	46.96 %	87.67 %
Jan., 09 to Mar, 09	40.51 %	88.00 %



The data reveals the fact that the case detection rate & cure rate for Buxar is quite good. The district doesn't fall in the high priority area & the treatment outcome rate is also showing an increasing trend. There are 03 TU and 14 DMC's in which one is not working due to non availbality of lab technician and rest 13 DMCs are working full fledged for RNTCP in the district.

Diagnostic Algorithm For Pulmonary TB



Categories of Treatment

Categories of Treatment	Type of Patient	Regimen and Duration		Total Duration
		IP	CP	
Cat-I	• New sputum smear-positive • Seriously ill** new sputum smear negative	2 ($H_3R_3E_3Z_3$) 8 weeks 24 doses	4(H_3R_3) 18 weeks 54 doses	6 months 78 doses
Cat-II	• Seriously ill** new extra-pulmonary • Relapse • Failure • Treatment After Default • Others	2 ($S_3H_3R_3E_3Z_3$) 1 ($H_3R_3E_3Z_3$) 12 weeks 36 doses	5 ($H_3R_3E_3$) 22 weeks 66 doses	8 months 102 doses
Cat-III	• New Sputum smear-negative, not seriously ill • New Extra pulmonary, Not seriously ill	2 ($H_3R_3Z_3$) 8 weeks 24 doses	4(H_3R_3) 18 weeks 54 doses	6 months 78 doses

Treatment outcomes

Cured : Initially sputum smear-positive patient who has completed treatment and had negative sputum smears, on two occasions, one of which was at the end of treatment.

Treatment completed: Sputum smear-positive patient who has completed treatment, with negative smears at the end of the intensive phase but none at the end of treatment.

Or : Sputum smear-negative TB patient who has received a full course of treatment and has not become smear-positive during or at the end of treatment.

Or : Extra-pulmonary TB patient who has received a full course of treatment and has not become smear-positive during or at the end of treatment.

Or : Extra-pulmonary TB patient who has received a full course of treatment and has not become smear-positive during or at the end of treatment.

Died : Patient who died during the course of treatment regardless of cause.

Failure : Any TB patient who is smear positive at 5 months or more after starting treatment. Failure also includes a patient who was treated with Category III regimen but who becomes smear positive during treatment.

Defaulted : A patient who has not taken anti-TB drugs for 2 months or more consecutively after starting treatment.

Transferred out : A patient who has been transferred to another Tuberculosis Unit/District and his/her treatment result (outcome) is not known.

Quarterly Report for RNTCP :

Action Plan for National Leprosy Eradication Programme :-

Introduction :

Leprosy is a chronic infectious disease caused by the bacteria known as Mycobacterium leprae. The disease mainly affects the peripheral nerves, skin, and occasionally some other structures. All systems and organs can be involved in leprosy except the Central Nervous System. Leprosy, with long incubation period between 9 months to 20 years after infection can affect all age groups. The signs and symptoms many vary between PB to MB depending upon the degree of patient's immunity to M. leprae, the causative agent. Nevertheless, 95% of the people in our community are immune to Leprosy. Since the Leprosy bacilli affect the peripheral nerves, and if not properly cared, the patients lose sensation by and large, in their hands, feet and eyes, and injuries to these insensitive parts may lead to disfigurement, which is the main consequence of this disease that generates fear and stigma. The early detection and prompt treatment of Leprosy with prescribed MDT not only cures Leprosy but also interrupts its transmission to others.

Epidemiology :

In 1991, the World Health Assembly took a measure initiative towards global elimination of Leprosy, an age old public health problem with devastating effects on its sufferers. The WHO's leadership, strong commitment of endemic countries and active support of NGO/VOs as well as donor agencies have jointly helped in reducing the global situation of Leprosy by about 90% and the elimination level achieved in more than a hundred countries. Currently, only a dozen countries have Leprosy as a major problem, and India contributes a large proportion (66%) of global Leprosy burden as Leprosy had been widely prevalent in this vast and populous country for centuries. With efficient implementation of well-planned efforts since 1953-54, India has also very substantially controlled Leprosy, During 1981, our country recorded a prevalence of 57.6 cases/10000 population, whereas, in March 2004, the prevalence had been brought down to 2.4 cases/10000 population.

Goal

Elimination

It is well known that tow initiatives:

1. The introduction of WHO recommended MDT in the 1980s and
2. The 1991 resolution of World health assembly to eliminate Leprosy as a public health problem.

Objectives :

To reduce the prevalence rate of leprosy below 1.

Made possible the remarkable progress the world has seen in the battle against Leprosy.

Our goal is to achieve elimination of Leprosy as a public health problem in India. Elimination of Leprosy aims at reducing the disease burden to very low levels so that after reaching such low levels the disease will disappear over a period of time. This very low level has been defined by WHO as a level of prevalence of less than 1 case per 1000 population.

Incubation Period

The incubation period in Leprosy in variable. It could be as small as 6 months or as long as 30 years. It is believed that the incubation period could be an average of 2-5 years.

Diagnosis of Leprosy

A case of Leprosy is diagnosed by eliciting cardinal signs of Leprosy through systematic clinical/bacterial examination.

1. Hypo pigmented or reddish color skin patch (es) with definite loss of sensation
2. Thickness and / or tenderness of peripheral nerves, resulting into damage to them, demonstrated by loss of sensation and weakness of muscles of hands, feet or face.
3. Demonstration of acid-fast bacilli in skin smears.

Classification of Leprosy

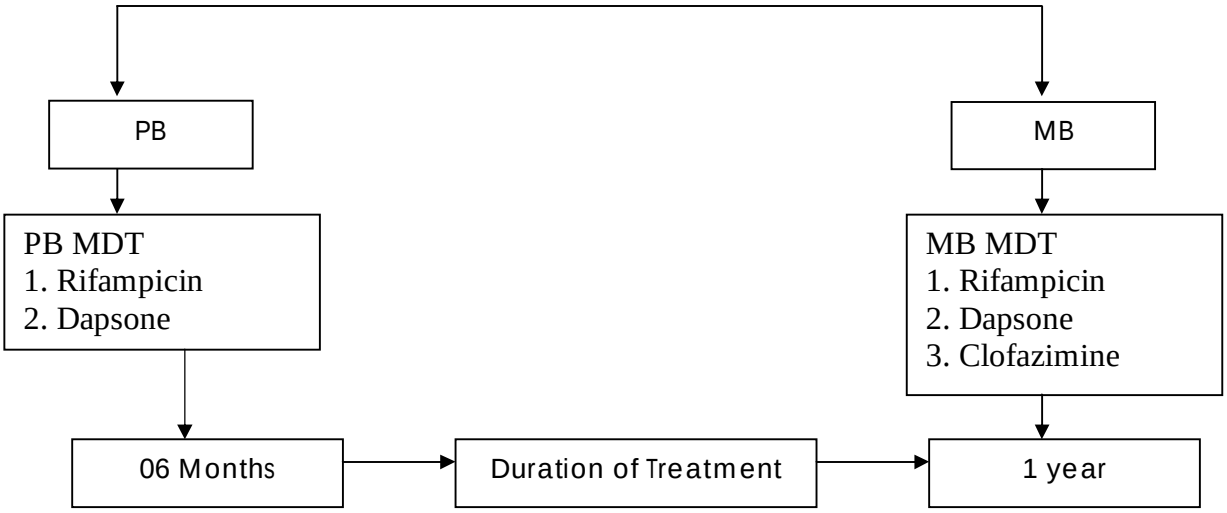
As per WHO classification, Leprosy is classified into two types for the purpose of treatment.

This classification is based on the number of skin lesions and nerve involvement.

1. Paucibacillary Leprosy (PB)
2. Multibacillary Leprosy (MB)

Lesions	Paucibacillary Leprosy (PB)	Multibacillary Leprosy (MB)
Skin Lesions : Includes Macules-Flat Lesions Papules-Raised Lesions	• 1 to 5 lesions • Big to medium • Asymmetrical • Definite loss of sensation • Dryness over the patch present • Loss of hair over the patch	• > 5 lesions • Small • Symmetrical • Loss of sensation (May be/May not be) • Dryness over the patch absent • No loss of hair over the patch
Nerve Damage: Resulting in loss of sensation or weakness of muscles supplied by the affected nerve	• Only 1 nerve involved	• 2 or more nerves involved

Treatment for Leprosy



Disability in Leprosy

Leprosy is associated with intense stigma because of the disabilities and deformities that from Leprosy.

Most of the disabilities that occur in Leprosy are preventable. Therefore, it is very important to prevent these disabilities from occurring.

Deformity: It is an alteration in the form, shape or appearance of a part of the body, i.e., anatomical changes, for example, depressed nose.
Disability: It is deterioration in one's ability or capacity, i.e., physiological change, for example, anesthesia of hand.

Simplified Information System (SIS)

The National Leprosy Eradication Programme (NLEP), which was a vertically administered programme so long, is now integrated with primary health care system in the state. The changes will need transfer of responsibility of running the programme from Leprosy oriented staff (Vertical staff) to general health care staff.

Elimination Indicators

Indicators are tools that are used to measure progress and achievement under a programme. Following are the indicators which are essential for monitoring of elimination of Leprosy:

1. Prevalence Rate

$$\text{P.R.} = \frac{\text{Total no. of Leprosy cases on treatment}}{\text{Total Mid-year population of PHC}} \times 100000$$

2. Annual New Case Detection Rate

$$\text{N.C.D.R} = \frac{\text{Total no. of Leprosy cases newly detected}}{\text{Total Mid-year population of PHC}} \times 100000$$

3. Child proportion among new cases

$$\text{Child} = \frac{\text{Total no. of new Leprosy cases detected upto 14yrs of age}}{\text{Proportion Total no. of newly detected Leprosy cases}} \times 100$$

4. Proportion of Visible Deformity among new cases

$$\text{Deformity} = \frac{\text{Total no. of newly detected cases with visible Deformity}}{\text{Proportion Total no. of newly detected Leprosy cases}} \times 100$$

5. Proportion of MB among new cases

$$\text{MB} = \frac{\text{Total no. of new MB cases}}{\text{Proportion Total no. of newly detected Leprosy cases}} \times 100$$

6. Proportion of females among new cases

$$\text{Female Proportion} = \frac{\text{Total no. of female cases}}{\text{Total no. of newly detected Leprosy cases}} \times 100$$

7. SC New Case Detection Rate

$$\text{SC NCDR} = \frac{\text{Total no. of new SC cases detected}}{\text{Total SC population in the given area}} \times 100$$

8. ST New Case Detection Rate

$$\text{ST NCDR} = \frac{\text{Total no. of new ST cases detected}}{\text{Total ST population in the given area}} \times 100$$

9. Patient Month BCP's Stock

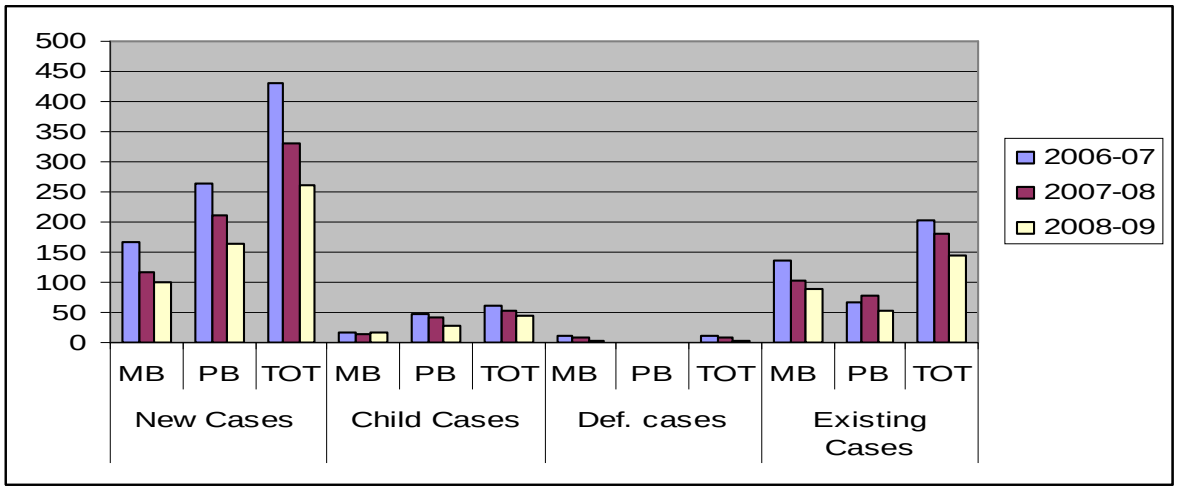
$$\text{PBM} = \frac{\text{No. of blister packs of each category}}{\text{No. of cases detected during the previous 3 months in each category}}$$

10. Proportion of Health Sub-centers providing MDT

$$\text{Proportion Of Health SC} = \frac{\text{Health sub-centers providing MDT} \times 100}{\text{Total no. of sub-centers}}$$

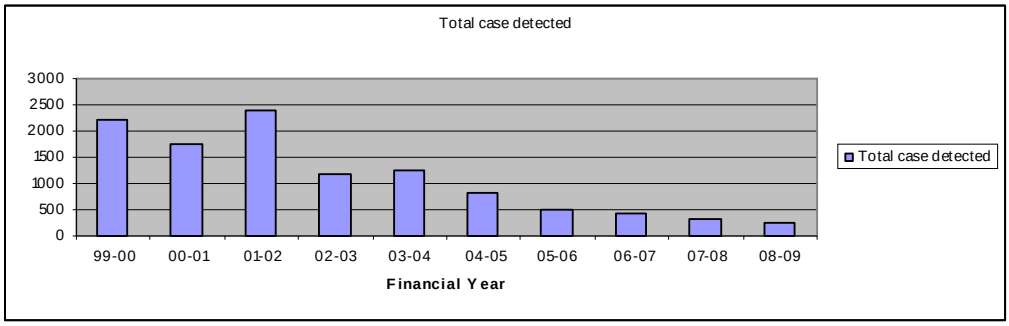
The NLEP status indicates following:--

	New Cases			Child Cases			Def. cases			Existing Cases		
	MB	PB	TOT	MB	PB	TOT	MB	PB	TOT	MB	PB	TOT
2006-07	166	265	431	16	46	62	10	00	10	137	66	203
2007-08	118	212	330	13	41	54	7	1	8	103	77	180
2008-09	99	163	262	16	29	45	2	0	2	90	54	144



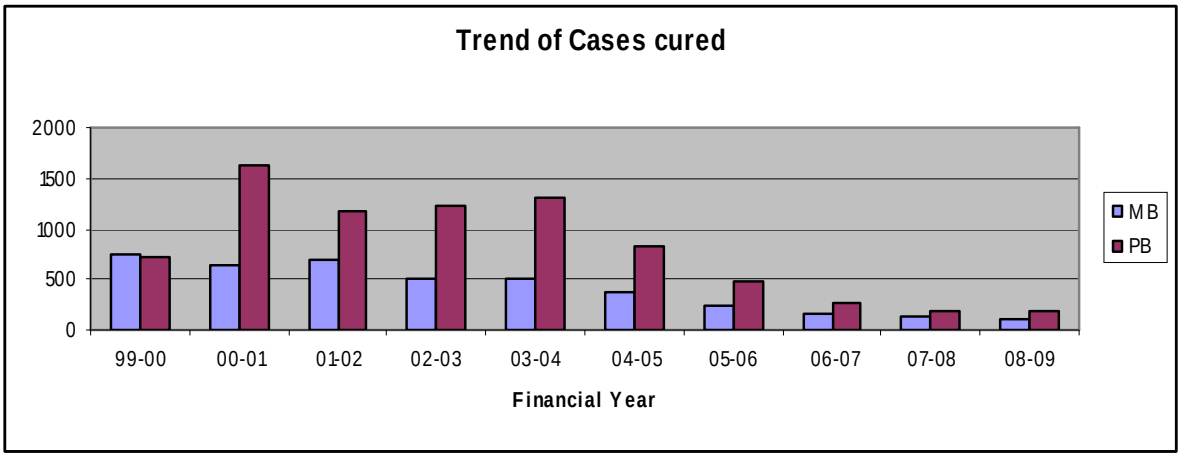
Trend of Total New Cases Detected :

Yrs.	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09
Total case detected	2210	1760	2397	1196	1241	812	500	431	330	262



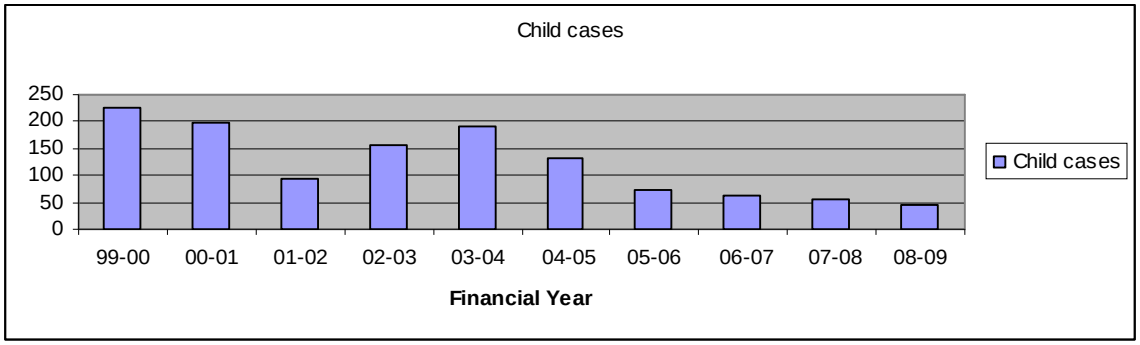
Trend of Cases cured (RFT) Detected :

Yrs.	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09
MB	754	649	689	515	514	368	238	163	144	107
PB	708	1625	1164	1235	1311	824	492	266	197	183



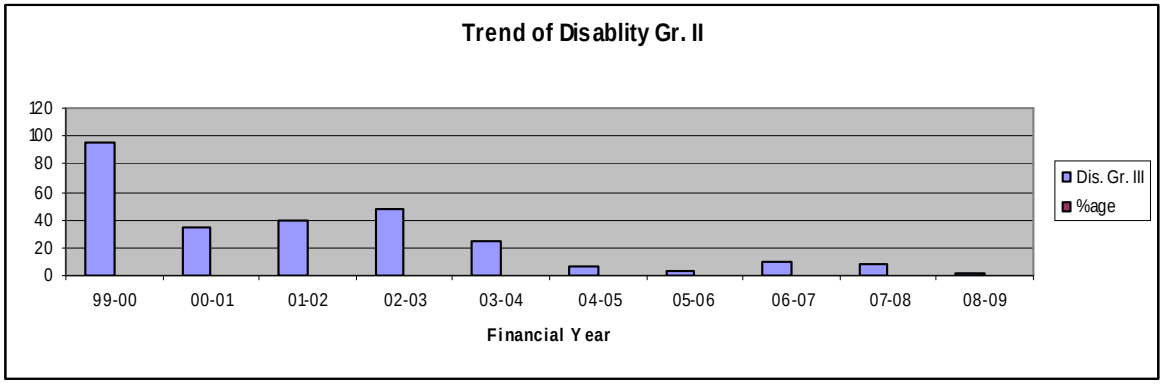
Trend of Child Cases Detected :

Yrs.	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09
Child cases	226	199	95	156	192	132	72	62	54	45



Trend of Disability Gr. II :

Yrs.	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09
Dis. Gr. III	96	35	39	47	24	07	04	10	08	02
% age	4.3%	2.0%	1.6%	2.4%	1.9%	0.9%	0.8%	2.3%	2.4%	0.8%



Action Plan for N.V.B.D.C.P. (National Vector Born Disease Control Programme) :-

Early Diagnosis and Case Management Strengthening surveillance system

Active surveillance :

- As such malaria is a Vector-borne disease and a local and focal problem.
- Malaria affects the Buxar district more then half of its area, and out of 7 blocks there are 4 blocks affected.
- Distributions of man power in epidemic prone blocks are proportionately lese so man power should be increased to this zone.
- Approximation to high risk blocks are for away to low risk blocks from the district for the purpose of supply as well as monitory of supervision.
- Level of attitude, knowledge and skills are definitely lacking in high risk blocks.

Referral to PHCs and SDH :

• Referral Malaria Cases :-

In PHC out of the total Malaria cases attending OPD or admitted as Indoor Patients, Some cases can develop complication and this requires to be referred to the nearest CHC or General Hospitals. In such referral centres anti Malaria Drugs and other facilities are very essential, therefore in each CHC and General Hospital such facilities will be provided such as E.Mail injections, IV sets, Glucose, Dextrose etc. Such Medical insti. Will also require Rapid Diagnostic kits such as Dipstik for complicated malaria cases.

Integrated Vector Management :

Selective use of IRS in high-risk areas :

As per the epidemiological parameters prescribed under MAP high-risk section having API-5 and above requires to be cover under spray. How ever in this project it has been suggested to select problematic village for IRS Promotion of Insecticide Treated Bed Nets (ITBN)

During current year (2006) in Buxar District mosquito net users survey as well as insecticide treated mosquito net distribution in Co-ordination with NGO is initiated the work done .

MIS :

Field level : Information and reporting agency is field health worker reports to primary health centers

PHC level : Collection and analysis of information and reports by supervisor and laboratory technician.

CHC level : Reporting to district level District Level : Collection, analysis, feedback, and forwarding such (Malaria branch) report at state level.

Action Plan for National Program for Control of Blindness (NPCB):

Introduction:-

The National programme for control of Blindness (NPCB) was launched in 1976. India was the first country in the world to have launched a national level programme. The programme was initiated after it was realized that cataract was the major cause of blindness in the country and that surgical facilities were not accessible to blindness was 1.38%. The NPCB thus adopted a goal of reducing the prevalence of blindness to 0.3% by the turn of the century. With the current cataract load, it is not possible to achieve this goal by 200 AD but all efforts are directed towards this end.

The Programme is being implemented as a 100% centrally sponsored programme since this inception. In 1982, it was included in the Prime minister's 20 point Socio-economic programme.

Objectives :-

1. Provision of comprehensive eye care facilities at primary, secondary and tertiary health care levels.
2. To achieve & substantial reduction in the prevalence of eye disease in general.
3. To achieve overall reduction in the prevalence of blindness to 0.3% by 2000 AD.

Critical Analysis :-

It is estimated that there are nearly 40 million people worldwide who are blind as per criteria defined by world health organization (W.H.O.)

W.H.O. Definition (1975) :-

Inability to count fingers at a distance of 3 meters (< 3/60) with the better eye, even after being provided best spectacle correction.

India NPCB definition :-

Visual acuity less than 6/60 (inability to count fingers at 6 meters or unable to read the top line of snellen's chart) in the better eye, with the available correction.

In India, it is different from the WHO way of defining blindness. This is because it is not possible for the eye care services in the country to provide refraction Services to the whole population.

Under National Program for Control of Blindness Buxar Dist. had given target for cataract surgery **2005-06 (3000), 2006-07 (3000) 2007-08 (3000) & 2008-09 (3000).** This includes surgery at District & Sub-District hospitals, Private Hospitals & NGO's. Since last 3 years Buxar District has achieved 34.40% performance in cataract surgery. This is very low due to non availability sufficient Eye surgeon and full fledged NGOs. In Sub Divisional hospital with Eye surgeon doing cataract surgery while the OT of the hospital is not proper. Apart form this the eye surgeon is very few as per the requirement. Therefore the cataract operation in govt. hospital is very less against the target.

Trend of Blindness Operation and School Screening Test

Sl. No.	Financial Year	Target	Cataract Operation			School Screening Eye Test	
			IOL	ICCE	TOTAL	Target	Achievement
01	2005-06	3000	97	1187	1284	50000	5016
02	2006-07	3000	252	1228	1480	50000	4017
03	2007-08	3000	626	123	749	50000	22037
04	2008-09	3000	201	415	616	50000	4316

District Blindness Control Society (DBCS)

The scheme of setting up a District Blindness Control Society in each district of the country was launched in the year 1994-1995 with the objective of decentralizing the implementation of the programme. The Government of India has been issuing guidelines from time to time to utilize the funds released to the DBCS in an effective and efficient manner.

The primary purpose of the District Blindness Control Society is to plan, implement and monitor all the blindness control activities in the district under overall guidance of the State/Central organization for NPCB.

Functions of DBCS:-

1. To assess the magnitude and spread of blindness in the district by means of active case finding village wise to be recorded and maintained in Blind Registers.
2. To organize the Screening camps for identifying those requiring cataract surgery.
3. To assess the status to available facilities and resources in the district infrastructure and manpower.
4. To identify and organize one day orientation for Govt. Functionaries, Community representatives and NGO's in order to secure their involvement in case finding, escort services, counseling and follow up of cases.
5. To plan training of personnel involved in eye care and identify trainers.
6. To periodically review and monitor the implementation of the District Action plan.
7. To assess and ensure the availability of drugs & consumables.
8. To review the level of utilization of equipments.
9. To receive and monitor use of funds equipments and materials from the government and other agencies.
10. To prepare a list of voluntary agencies and private hospitals and actively involve then in the programme.

11. To organize screening of school and preschool children for eye defects by involving parents, teachers and other functionaries.
12. To provide free spectacles to the poor patients who have undergone cataract surgery as well as those suffering from eye defects/refractive errors.
13. To motivate people to pledge their eyes for donation by utilizing all available media.
14. To ensure distribution of prophylactic vitamin A to prevent blindness due to Vit. A deficiency among children as part of child survival and safe motherhood programme, through the health functionaries of the district.
15. To collect /compile and review information of work done.

Strategies:

The four-pronged strategy of the programme is.

a) Strengthening service delivery.
b) Developing human resources for eye care.
c) Promoting outreach activities and public awareness.
d) Developing institutional capacity.

Micro-Planning at District level.

- ***Listing of Blind persons: (50+years)***

  In each village of the district screening done by trained health staff involvement of NGOs. Panchayat or Volunteers after one day training for preparation of village-wise registers of blind persons.

- ***Mapping of eye care infrastructure:-***

  By plotting all fixed facilities and eye surgeons in Govt. Voluntary and private sectors available within the district. Distribute the target among the villages based on the village wise population of the blind.

- ***Target Setting:-***

  Considering the objective of clearing the backlog of cataract blind persons in next 3 years and addressing new cases of cataract the cataract surgery rate of about 600 operations per 1,00,000 populations needs to be achieved.

  As there is higher prevalence of blindness amongst women it is expected that more than 50% of all operations should be for women. To emphasize equitable distribution of services in various blacks, it would be preferable to assign targets for each block on the basis of its population. This will help in identifying blocks which have no facilities and require a camp approach.

Options for surgical Services

- ***Reach in strategy :-***

  It is suggested that 75 to 80% of total target must be achieved through institutions/hospital based operations. A vehicle should be assigned/hired

by the PHC/DBCS/NGO/Govt. Hospital to bring the blind to the base hospital and after being discharged drop they back to villages.

- ***Reach out strategy (Camps) :-***

  There would be on an average 20% villages, which are remote (50k.m. away from any eye care facility or more than 10 km of walking with no roads or bus) such identified remote villages can be grouped in to clusters to arrive at the nodal campsite which has a basic facility of building are rooms which can be sterilized and concerted into an operation theatre.

Assessment of Resources

- ***Material requirements :-***

  For providing services in an on interrupted manner, a careful assessment of requirements of drags and consumables.

- ***Manpower requirement:-***

  Support staff like ophthalmic assistants, nurses, O.T. assistants should be assessed for each facility. Those personnel requiring training in various fields should be identity and their training should be planned.

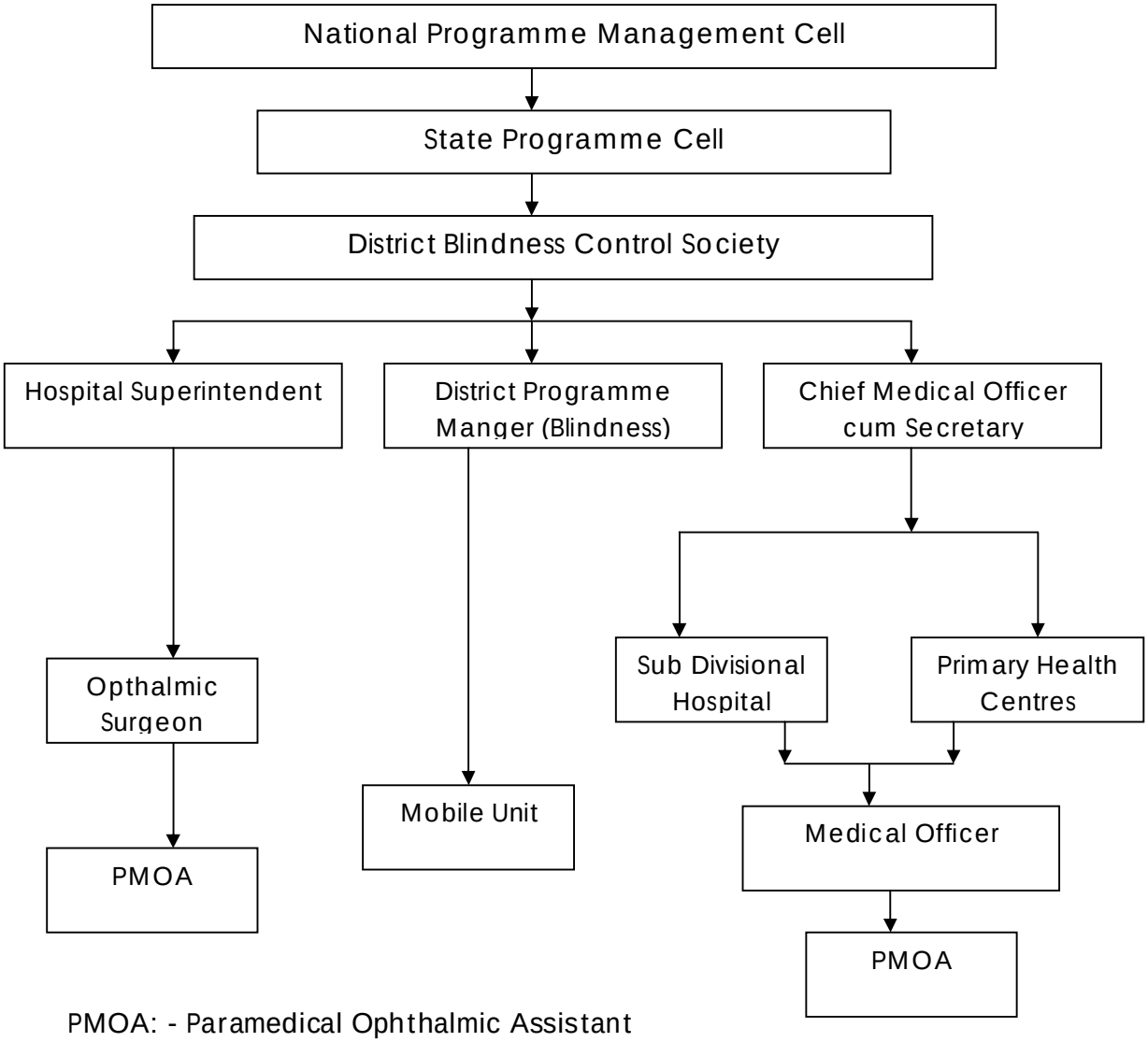
- ***Preparation of cases where:-***

  Involvement of NGOs is anticipated should be carefully assessed.

- All free surgeries should be followed by provision of best possible corrective glasses after refraction.

Monitoring for quality Control:-

- Random checks need to be carried out to assess the validity of reported data, status of follow-up provision of glasses, and patient satisfaction.
- Standard cataract surgery records should be filled up for each operation performed.
- Periodic review to assess the progress in each block and by each provider unit.



PMOA: - Paramedical Ophthalmic Assistant

Summary

National programme for control of Blindness (NPCB) decentralized the implementation of the programme by setting up a District Blindness Control Societies (DBCS) in each district of the country with the goal of achieving 0.3% level of prevalence of blindness and to achieve excellence in eye care services resting of high quality patient care the upgraded PHC & CHC have been identified as important service delivery points under the NPCB The Medical Officer's Posted at Such centers along with their support staff have a major role to play in the national efforts.

Action Plan for Integrated Disease Surveillance Program :-

Introduction :

Integrated Disease Surveillance Project (IDSP) is a decentralized, state based surveillance program in the country. It is intended to detect early warning signals of impending outbreaks and help initiate an effective response in a timely manner. It is also expected to provide essential data to monitor progress of on-going disease control programs and help allocate health resources more efficiently.

All outbreaks cannot be predicted or prevented. However, precautionary measures can be taken within the existing health infrastructure and service delivery to reduce risks of outbreaks and to minimize the scale of the outbreak, if it occurs. The effectiveness with which national programs are implemented and monitored, the alertness for identification of early warning signals and the capacity for initiating recommended specific interventions in a timely manner are important to achieve the above objectives.

The course of an epidemic is dependent on how early the outbreak is identified and how effectively specific control measures are applied. The epidemiological impact of the outbreak control measures can be expected to be significant only if these measures are applied in time. Scarce resources are often wasted in undertaking such measures after the outbreak has already peaked and the outcome of such measures in limiting the spread of the outbreak and in reducing the number of cases and deaths are negligible.

When outbreaks occur or when the risk of such outbreaks his high, the co-operation of other government departments, non-governmental agencies and the community often becomes necessary. Such help will be more forthcoming if mechanisms for interactions have been development before the onset of and outbreak.

The frequency of the occurrence of epidemics is an indication of the inadequacy of the surveillance system and preparedness to identify and control outbreaks in a timely manner.

Objective :

The overall general objective of the IDSP is to provide a rational basis for decision-making and implementing public health interventions that are efficacious in responding to priority diseases. Keeping this in mind the main objectives of the IDSP are :

- To establish a decentralized district-based system of surveillance for communicable and non-communicable diseases so that timely and effective public health actions can be initiated in responses to health challenges in the urban and rural areas.
- To integrate existing surveillance activities (to the extent possible without having a negative impact on their activities) so as to avoid duplication and facilitate sharing of information across all disease control

programs and other stake holders, so that valid data are available for decision making at district, state and national levels.

Strategy :

The IDSP proposes a comprehensive strategy for improving disease surveillance and response through an integrated approach. This approach provides for a rational use of resources for disease control and prevention. In the integrated disease surveillance system :

- The district level is the focus integrating surveillance function.
- All surveillance activities are coordinated and streamlined. Rather than using scarce resources to maintain vertical activities, resources are combined to collect information from a single focal point at each level.
- Several activities are combined into one integral activity to take advantage of similar surveillance function, skills, resources and target population.
- The IDSP integrates both public and private sector by involving the private practitioners, private hospitals, private labs, NGOs, etc and also emphasis on community participation.
- The IDSP integrates communicable and non-communicable diseases. Common to both of them are their purpose in describing the health problem, monitoring trends, estimating the health burden and evaluating programmes for preventing and control.
- Integration of both rural and urban health systems as rapid urbanization has resulted in the health services not keeping pace with the growing needs of the urban populace. The gaps in receiving health information from the urban areas needs to be bridged urgently.

Integration with the medical colleges (both private and public) would also qualitatively improve the disease surveillance especially through better coverage.