

ICDDR,B Strategic Plan -To the 2000 Year-

Executive Summary

- MISSION STATEMENT -

"The fundamental mission of the Centre is to develop and disseminate solutions to major health and population problems facing the world, with emphasis on simple and cost-effective methods of prevention and management."

"Increased scientific knowledge has accounted for much of the dramatic improvement in health that has occurred in this century - by providing information that forms the basis of household and government action and by underpinning the development of preventative, curative and diagnostic technologies. ... Because the fruits of science benefit all countries, internationally collaborative efforts, of which there are several excellent examples, will often be the right way to proceed."

- World Development Report 1993 "Investing In Health", World Bank

History

Since 1960, the Cholera Research Laboratory (CRL) and its successor, the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), has earned the reputation as the leading international health research centre located in a developing country. CRL conducted research that now forms the core of the world's knowledge of diarrhoeal diseases, and led to the development of Oral Rehydration Solution (ORS). The CRL was internationalised, and became ICDDR,B in 1978. ICDDR,B, or "the Centre", is an international, non-profit, health research and training institute with a mandate to address diarrhoeal diseases and the related problems of nutrition and fertility.

ICDDR,B addresses a critical core of interacting health and population problems affecting the great majority of humankind, the solutions for which act synergistically to improve well-being. The work of the CRL/ICDDR,B is often cited as the authority for important health and population-related decisions taken by multi-lateral, government and development agencies throughout the world. Indeed, many of the Centre's alumni are influential policy makers in these agencies.

Comparative Advantages

ICDDR,B is a sophisticated, multidisciplinary research centre located in one of the poorest, most densely populated countries in the world. The rural- and urban-based hospitals, backed by the state-of-the-art laboratories, have allowed rapid completion of research on diagnostic techniques, and specific nutritional and pharmaceutical interventions.

ICDDR,B's extensive rural and urban community-based health services, together with its excellent working relationships with the Government of Bangladesh (GoB) and Non Government Organisations (NGOs), provide exciting opportunities for social, behavioural, environmental and operations research on high priority national, regional and global issues in a wide variety of settings.

Years of experience and meticulous record-keeping have given ICDDR,B an incomparable wealth of information, data and samples. Surveillance systems for clinical, epidemiological, health systems, and demographic research provide invaluable information for health and family planning programmes throughout the world.

The Centre's strong scientific management, international connections and its key position in the international scientific community ensure that its research agenda remains relevant and at the forefront of international health.

Research Activities

Child Survival

In 1978, at Alma Ata, world leaders pledged to work for health for all by the year 2000. Nonetheless, as we approach the turn of the century, millions of children still die unnecessarily from three categories of infectious diseases that could be prevented or mitigated with simple, cost-effective, primary health care interventions.

Despite many advances, diarrhoeal diseases are responsible for 3 million child deaths every year. Of these, approximately 50% are due to watery diarrhoea and occur either because of lack of access to ORS and/or health facilities, or because of incorrect case management (home or health facility). The remainder are accounted for by persistent diarrhoea (approximately 35%) and dysentery (approximately 15%). The successes of the campaign, spear-headed by CRL/ICDDR,B, to reduce mortality from diarrhoeal diseases has meant that they have now been replaced by acute respiratory tract infections (ARI) as the leading cause of death among children in developing countries. ARI now kills 3.6 million children each year. The success of the global Expanded Programme on Immunisation (EPI) has meant that it is estimated to be saving about 3 million lives annually. However, EPI preventable diseases (measles, tuberculosis, tetanus, diphtheria, polio, and pertussis) are still responsible for some 2.1 million child deaths every year. Of these, almost 1 million are attributed to measles. The common thread that links these infectious diseases is the nutrition of the mother and child. Malnutrition predisposes children to disease, and diseases often result in worse nutritional status, and consequently a vicious cycle of cause and effect is established.

ICDDR,B's multidisciplinary teams will continue to conduct valuable research into these pressing health issues that together cause 65% of all child deaths. The synergy of researchers from differing disciplines located where the diseases are most prevalent allows the Centre to examine these problems in a manner not possible anywhere else in the world. ICDDR,B will continue its work on the prevention and management of diarrhoeal diseases and the related aspects of these key Child Survival issues.

Population and Reproductive Health

It is almost 20 years since the first World Population Conference agreed that "all couples and individuals have the basic right to decide freely and responsibly the number and spacing of their children and to have the information, education and means to do so."

Among ICDDR,B's priorities is a commitment to address the issue of women's reproductive health. This includes the right to reproduce as well as regulate their fertility, to go through pregnancy and childbirth safely, and to have sexual relationships free of the fear of unwanted pregnancy and of contracting disease.

Given current trends, 61 nations are set to double their populations in one generation, between 1990 and 2025. It is estimated that approximately one pregnancy in five in the developing world is unwanted and unplanned. Population and family planning must and will remain at the top of the world's agenda for many years to come. The need to address safe motherhood issues is compelling. In the period 1976-1985, for example, 37% of all deaths to women of reproductive age in Matlab, rural Bangladesh, were maternal. There is now agreement that emergency obstetric care (EOC) must be the indispensable core of any programme to reduce maternal mortality, but how to do this requires more operations research. Other related issues include death from abortion and violence which also require careful study. Reproductive tract infections (RTIs), sexually transmitted diseases (STDs) - including Human Immuno-deficiency Virus (HIV) - and their sequelae are inextricably related to key health development programmes, including family planning, child survival and safe motherhood.

ICDDR,B's new emphasis on RTIs, STDs and HIV arises from, and will be complementary to, its work on family planning and population issues. Research in this area will require collaboration between medical, (clinical, laboratory and epidemiological), and social (anthropological, demographic, psychological) scientists, and the development and testing of methods to collect sensitive information on sexual behaviour and disease recognition. With its broad multidisciplinary approach, the Centre is able to address these problems most effectively. ICDDR,B's work will continue to capitalise on the synergies that exist between population and family planning, child survival, and reproductive health programmes.

Application and Policy

There is growing recognition that finding effective ways to deliver existing, proven, low-cost health and family planning technologies to the rural and urban poor could save as many lives as a new vaccine or drug. Among ICDDR,B's major strengths is its expertise and facilities for testing and quantifying the effectiveness of health and family planning programme interventions in reducing the morbidity and mortality of women and children, and decreasing fertility rates. ICDDR,B also has the expertise to assist in the nationwide extension and replication of lessons learned in its rural Matlab station, as has been demonstrated by the pioneering MCH-FP Extension Project.

ICDDR,B will continue to play a major role in improving both the supply of, and demand for, existing health technologies, and in replicating the successful interventions piloted in Matlab and the MCH-FP and Urban Health Extension Projects. In addition, ICDDR,B will increase its communication and dissemination efforts to influence and improve international and national health policies in the areas of its expertise. ICDDR,B recognises, and has given a high priority to, the need to transform research findings into action.

Institutional Needs

The research activities envisaged to the year 2000 are logical extensions of earlier work, and will build on the experience of the past. These activities will utilise the unique and comprehensive facility built up over the last 30 years. However, ICDDR,B recognises the need to continue to develop expertise and facilities in order to enter into new areas of activity, and to strengthen others. The Centre will invest in its human resources, to develop a cadre of world-class scientists and to maintain their technical skills at the leading edge of modern science. Three areas of expertise will be strengthened in line with the proposed research activities: social and behavioural sciences, operations research, and the study of basic mechanisms in diarrhoea.

To maintain ICDDR,B's unique interdisciplinary health research facilities and to ensure that ICDDR,B remains a centre of excellence serving the global community, it is essential to invest in the Centre's infrastructure. The physical buildings and equipment of ICDDR,B must be

maintained and developed to prepare the Centre to face the challenges of the coming years. The laboratories need to keep pace with the latest technology, and the Centre should develop diagnostic capability to isolate the common viral and bacterial organisms associated with acute infections of the respiratory tract. The Centre's centralised mainframe and computer systems are coming to the end of their useful lives, and must now be replaced.

As part of the strategy for ICDDR,B to operate only in areas where it has clear comparative advantage, it will look to institutional linkages to provide technical assistance in areas where the Centre's capability is limited, and where such linkages will facilitate the effective implementation of research and training programmes. Institutional linkages will be expanded in both developing and developed countries.

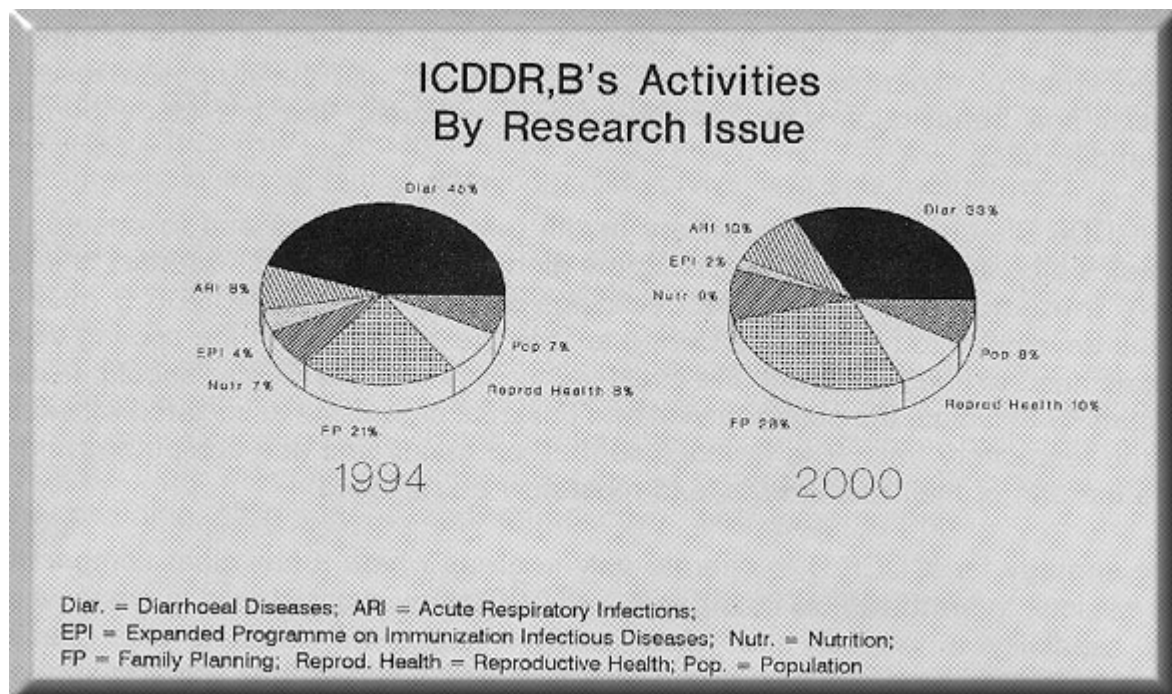
It is recognised that the research agenda to the year 2000 requires changes in the organisation of ICDDR,B to accommodate and reflect new directions and emphasis. The Centre will continue current efforts to find alternative mechanisms to reduce the burden of service provision (in particular the Dhaka hospital) on its finances.

Meeting the Needs

To meet the needs outlined above, and finance the research activities to the year 2000, ICDDR,B has developed a resource development strategy. While recognising that ICDDR,B will have to rely on the support of multi- and bi-lateral donors, the strategy details an approach to broadening the Centre's donor base and establishing endowment funds to safeguard excellent research from short-term financial instability and cash flow problems.

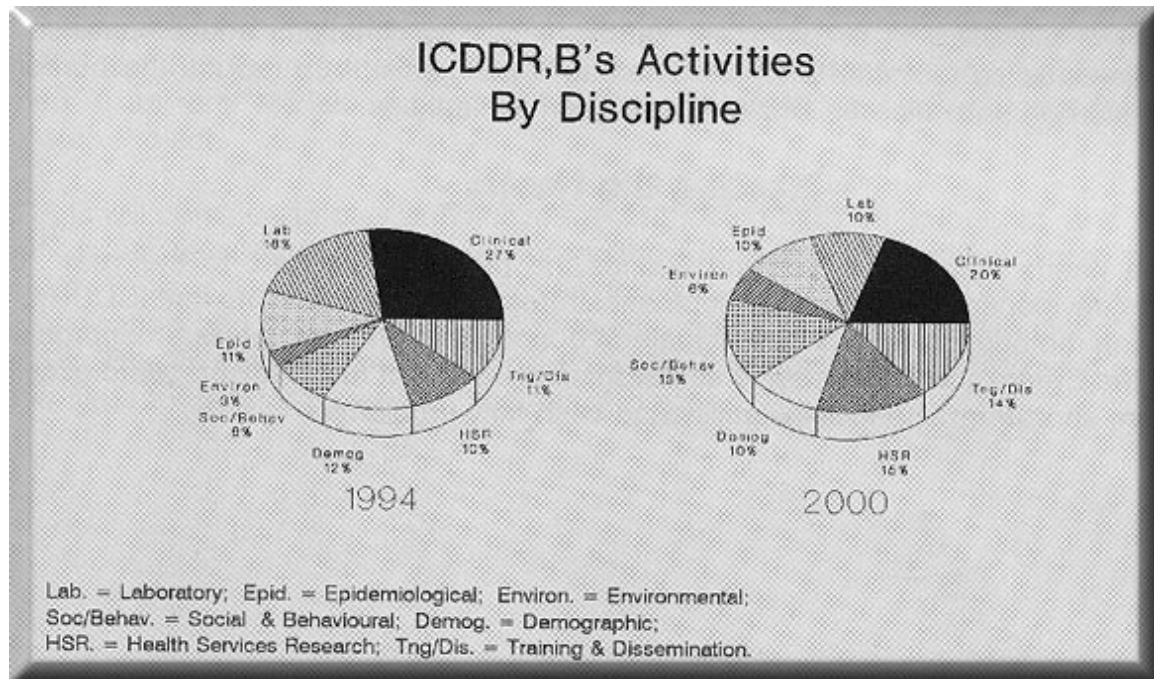
Changing Issues ... Changing Emphasis

In response to the changing needs in the areas of ICDDR,B's expertise, the focus of the Centre's work will also change.



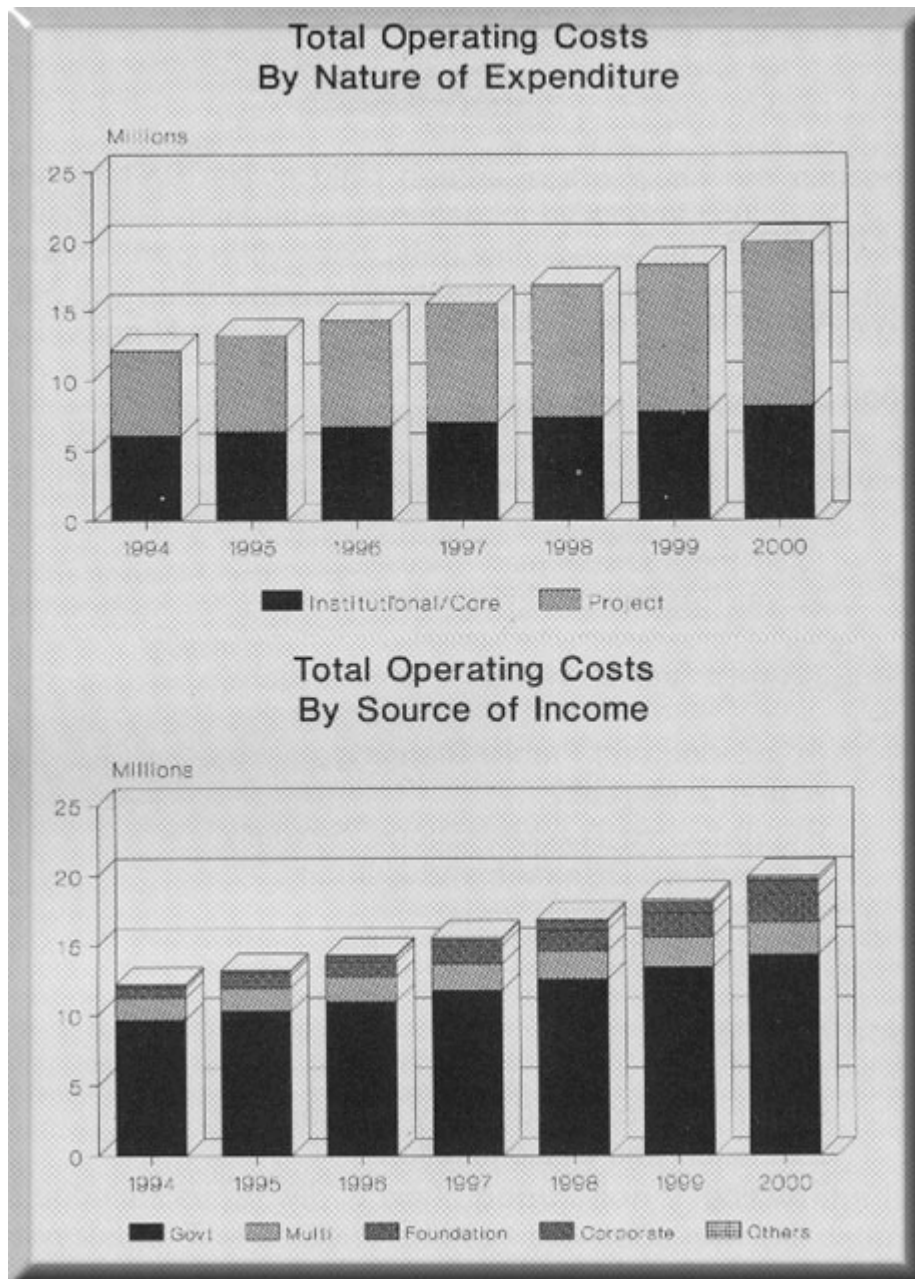
Diar. = Diarrhoeal Diseases; ARI = Acute Respiratory Infections; EPI = Expanded Programme on Immunization Infectious Diseases; Nutr. = Nutrition; FP = Family Planning; Reprod. Health = Reproductive Health; Pop. = Population

In response to the changing needs in the areas of ICDDR,B's expertise, the nature and approach of the Centre's work will also change.



Lab. = Laboratory; Epid. = Epidemiological; Environ. = Environmental; Soc/Behav. = Social & Behavioural; Demog. = Demographic; HSR. = Health Services Research; Tng/Dis. = Training & Dissemination.

Funding Needs To The Year 2000



Note: These graphs exclude contributions to the Hospital Endowment/Centre Fund, and the capital investments needed over the next five years to maintain and develop the Centre's infrastructure

By Division	\$'000	By Asset Type	\$'000
Clinical Sciences	1,072	Laboratory, Research &	-
Community Health	519	Hospital Equipment	1,457
Laboratory Sciences	480	Computer/Internet Network	500
Family Planning &	-	Civil Works	415
Population Sciences	40	Motor Vehicles	349
Administration	810	Office Equipment	200
Total	2,921	Total	2,921