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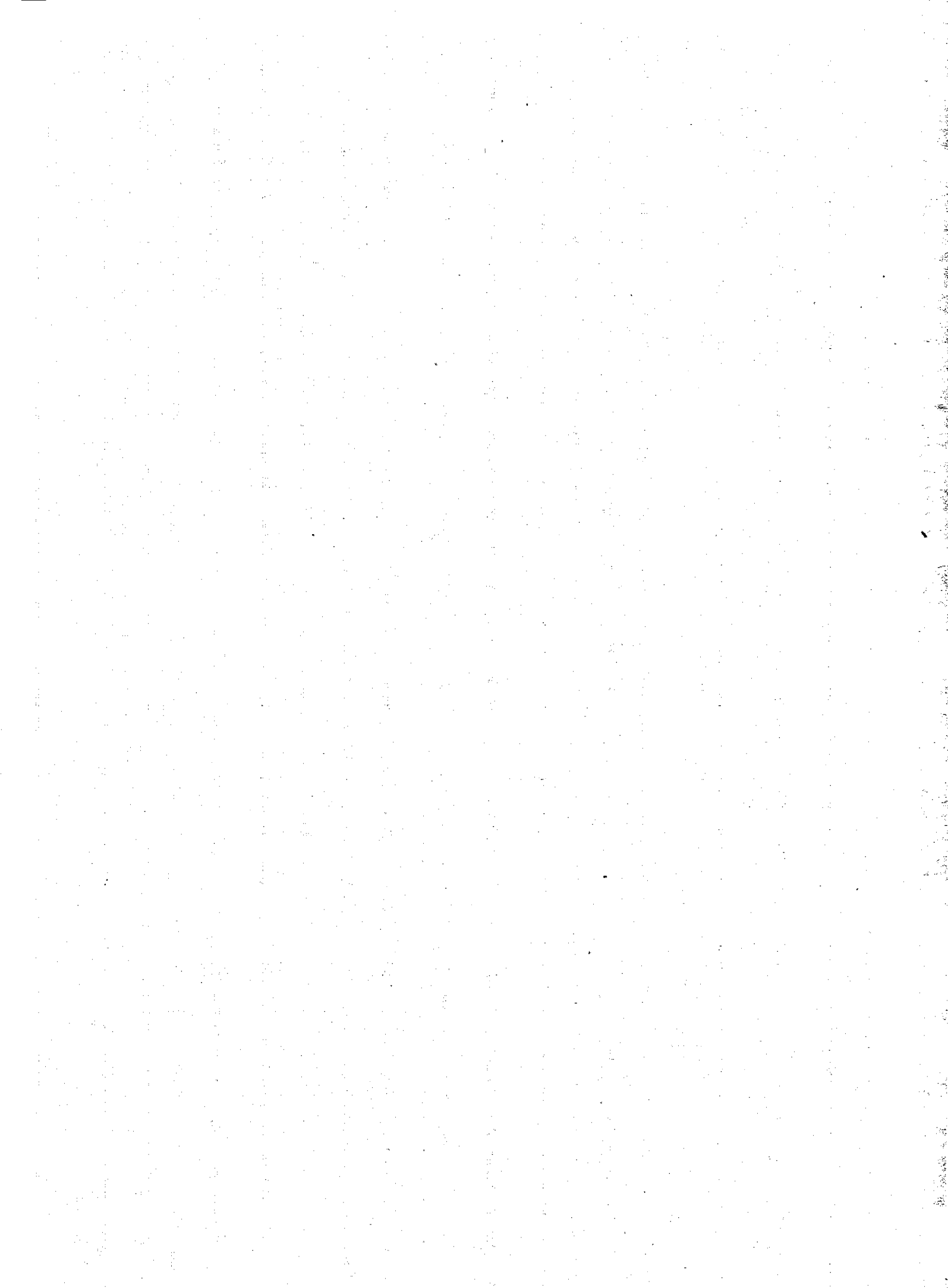
Situation Analysis of Children and Women in Bangladesh 1992

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**Situation Analysis of Children and Women in
Bangladesh**

1992

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Acronyms

ADP	Annual Development Programme
ARI	Acute Respiratory Infections
BBS	Bangladesh Bureau of Statistics
BIDS	Bangladesh Institute for Development Studies
BRAC	Bangladesh Rural Advancement Committee
CBR	Crude Birth Rate
CDR	Crude Death Rate
CPR	Contraceptive Prevalence Rate
DPHE	Department of Public Health Engineering
EPI	Expanded Programme on Immunization
FWA	Family Welfare Assistant
GDP	Gross Domestic Product
GNP	Gross National Product
GOB	Government of Bangladesh
HSC	Higher Secondary Certificate
IPHN	Institute of Public Health Nutrition
NGO	Non-Governmental Organization
ORS	Oral Rehydration Salts
TFR	Total Fertility Rate
UNDP	United Nations Development Programme
WHO	World Health Organization

Preface

Situation Analysis - Bangladesh

Preface

Although Bangladesh is one of the world's poorest and most densely populated countries, its story is one of both failures and successes. Repeatedly ravaged by floods and cyclones, the country is able to respond far more quickly and effectively to natural disasters than in the past. Great strides have also been made in providing the population with clean tubewell water while the Expanded Programme of Immunization has dramatically increased the number of children and women protected by immunization. There has also been a gradual decline in infant mortality rates, a remarkable increase in usage of contraceptive methods and a decline in fertility.

But there is still a long way to go. The infant and maternal mortality rates remain unacceptably high while the population continues to grow at an alarming rate. A significant proportion of the population is so poor that they cannot even adequately feed and cloth themselves or their children, let alone provide for health care and education. In fact, there is evidence that the condition of the poorest of the poor has worsened in recent years. The adult literacy rate is amongst the lowest in the world and it is particularly alarming that only 22% of adult women are literate. This has serious implications for the development of future generations.

Great improvements have been made in the supply of clean water but sanitation remains an issue of concern as only 6% of the rural population have access to a sanitary latrine. This is reflected in the continued high incidence of diarrhoeal diseases. The provision of basic health care has also lagged behind. The serious problem of iodine deficiency, which causes miscarriage, cretinism and neonatal deaths as well as hinders the intellectual development of children, is widespread and may be getting worse. Although a simple measure for controlling iodine deficiency has been identified (salt iodization), it will only be fully implemented in 1993. The situation of children and women is so critical that Bangladesh cannot wait for significant economic and social changes to occur before tackling the problems that influence child survival. Indeed, the World Bank has observed that economic development and growth cannot be expected to overcome poverty.

Preface

Significant progress has been made in solving some of the problems and the Government has shown its support for human development by becoming a signatory to the declaration of the World Summit for Children and the Convention of the Rights of the Child. A challenge presently facing the Government is to change budget priorities and focus attention on primary education, sanitation and the provision of basic preventive health care so that Bangladesh can move along the road to meaningful development.

The Life Cycle

The Life Cycle of a Child

From her first cry at birth, a girl child has to battle traditional preference for boys. At the birth of a boy, the parents give *azan* - a call for prayers. For the birth of a girl, no *azan* is called.

Whatever conditions prevail for children, they are always worse for girls than for boys, from the very food she gets to eat, to the education she receives. For this reason, the story of the children in Bangladesh will be told from the perspective of girl children.

Birth

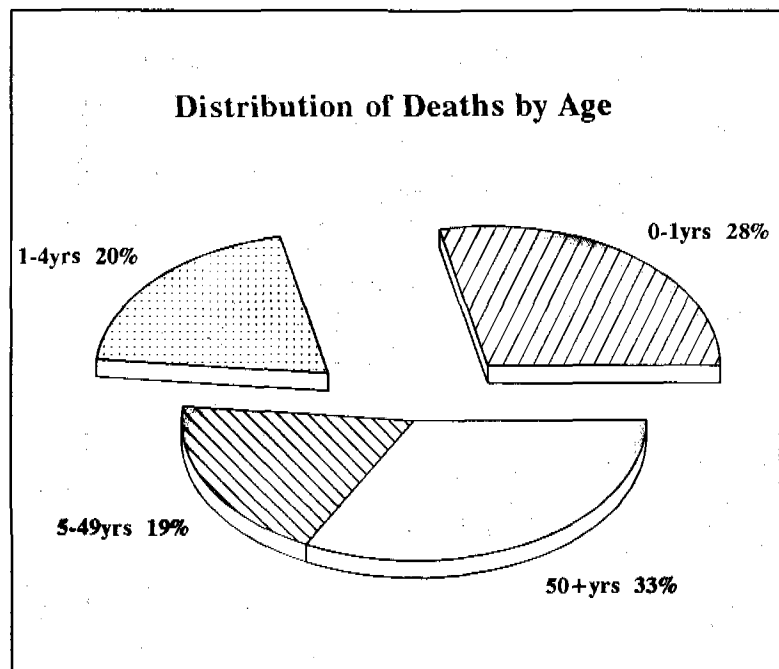
Births are usually attended by female family members with perhaps an untrained villager or friend to help. Fewer than 10% of rural births and 45% of urban births are attended by someone trained in modern obstetric practices.⁽¹⁾

Within hours of birth, 12 of every 1,000 children born alive will die, eight of them from birth injuries, often caused by untrained attendants, three because of prematurity and one of other causes.⁽²⁾

Underweight Babies

Low birth weight babies have a high risk of mortality. Approximately a third to a half of all newborns have a birth weight of less than 2,500 grams.⁽³⁾

Maternal malnutrition, small stature of the mother, infections during pregnancy, anaemia and closely spaced pregnancies are contributory factors for this low birth weight.



Half of all deaths are in children under five years of age

Life Cycle

The First Week of Life

In the first week of life, of the cohort of 1000 newborns being followed, a further 23 babies die - 16 because of prematurity, five because of neonatal tetanus and the remaining two of other causes.

Tetanus

Poor hygiene during and after birth is the major reason for infants dying from tetanus. One of the solutions to this problem is immunizing mothers before or during pregnancy. Seventy five percent of women between the ages of 15 and 45 received tetanus toxoid immunizations by early 1992. ⁽⁴⁾ This level is one of the highest in Asia.

Breastfeeding

Breastfeeding is virtually universal. Over 90% of mothers breastfeed their children for over a year, with 46% continuing up to two years. ⁽⁵⁾

Breastfeeding is universal but colostrum is usually not given

But exclusive breastfeeding is increasingly unusual. Colostrum, which is rich in antibodies, is rarely given to the baby because of the commonly held belief that it is harmful. Thus, for the first two or more days after birth, water mixed with honey or some other substitute is given. This puts the child at great risk of infection, not only because of dirty bottles and contaminated water, but also because lactation is reduced and the baby does not receive the necessary antibodies found in colostrum.

Supplementation of breastmilk also starts too early, with 86% of babies receiving a breastmilk substitute before they are five months old.

The First Year of Life

Between the first week of life and the end of the first year, a further 75 per 1,000 babies die - 11 from tetanus, 24 from acute respiratory infections, including pneumonia, 13 from diarrhoea and 27 from other causes.

The Baby Girl Falter

For the first few months of life, the mortality rate for girls is lower than for boys. This is the norm around the world. But unlike most countries, in Bangladesh, at seven or eight months of age, the growth of the girl begins to falter and her mortality rate becomes higher than that for boys. ⁽⁶⁾

There are a number of reasons for this reversal in trend. First, once weaning begins, girl babies are given less food than boys, putting them at greater risk for malnutrition and disease. Finally, parents are slower to seek medical help for a sick girl.

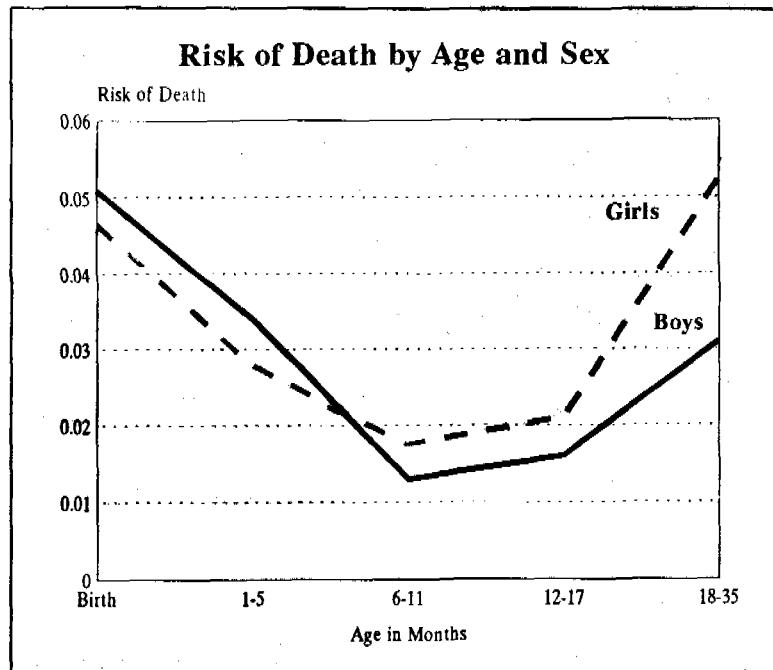
There is a strong belief among mothers that boys get sick more often, therefore they need more medical help.

Acute Respiratory Infections

Acute respiratory infections (ARI) are one of the major causes of death for babies under the age of one. For a malnourished baby, some coughs or colds can become life threatening, especially without antibiotic treatment.

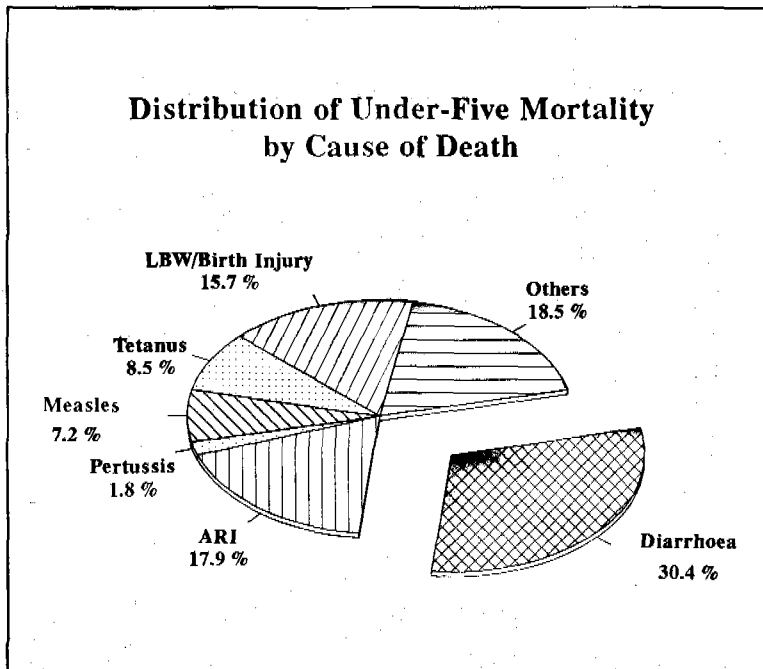
Mothers commonly believe that respiratory infections are caused by exposure to cold, even through sucking breast milk of a mother who has a cold. The home treatment is to protect the mother from cold and to limit the diet, especially of the mother.

By using an anthropological research technique, it became evident that while most women consider labored breathing and chest in-drawing as symptoms of serious ARI, few can correctly identify the different symptoms. ⁽⁷⁾



Life Cycle

The Years Before School



Seventy four more children die between the ages of one and five years, making the under-five mortality rate 184 per 1,000 live births.⁽⁸⁾

A third of all under-five deaths are attributable to diarrhoea and malnutrition: diarrhoea which causes malnutrition and malnutrition which makes the child more vulnerable to diarrhoea. Once caught in this cycle of ill health, the child is also more at risk from other childhood diseases.

Urban Poor

It is difficult to get accurate figures for the mortality rates of the children of the urban poor. A survey by the Centre for Urban Studies estimates that between 150 and 180 infants die annually and 300 under-five children die per 1,000 live births. These figures are substantially higher than either those found amongst other urban or rural children.

Tetanus appears to be the leading killer of infants while diarrhoea, respiratory infections, measles, typhoid and diphtheria are the leading causes of death for children under five.⁽⁹⁾ This pattern is similar to that of the whole population.

Diarrhoea

Each year over 65 million episodes of diarrhoea occur in children under five, resulting in 260,000 deaths - a third of all child deaths.⁽¹⁰⁾

The Urban Poor

In 1989, a team of researchers from the Bangladesh Institute of Development Studies (BIDS) conducted a study of the Agargaon squatter settlements - one of the largest slums in Dhaka. They found that most of the slum dwellers were young people and children who had migrated from rural areas in search of work.

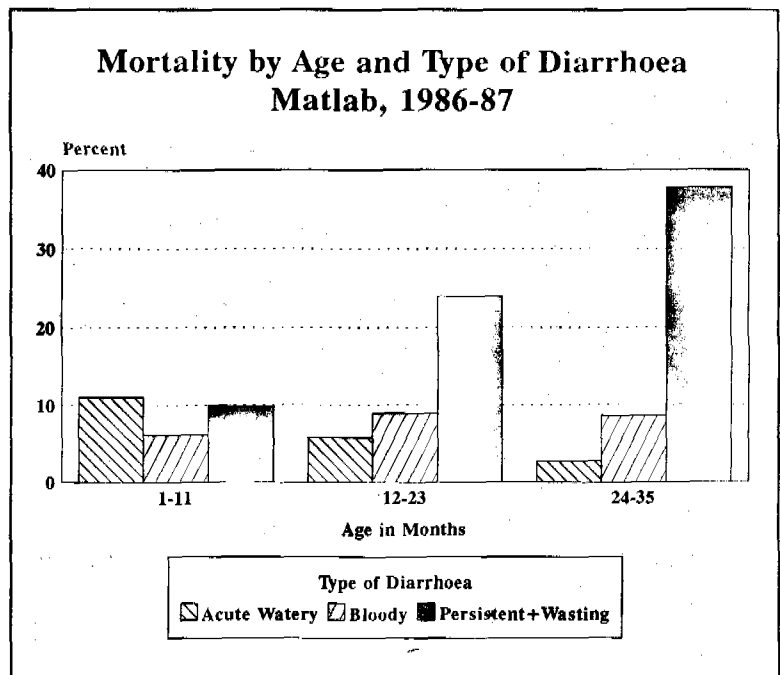
About 77% of the men were employed, with nearly full employment for men between 20 and 35 years of age. The most common occupation was rickshaw puller, especially for the most recent arrivals in the city. About 25% of the women were employed, mostly as domestic servants or garment workers.

The average daily income per household was estimated at 78 taka but about 28% of households earned more than this. About 10% earned more than 250 taka per day, which is far above the poverty line income set by the study. Incomes tended to rise the longer people stayed in Dhaka, so recent immigrants usually earned less than longtime residents.

The researchers found that the slum was not the rootless and chaotic place they had expected. Rural traditions and an informal *shalish* (informal community level organizations) were used to solve family problems and crimes like stealing, rape, and street fighting. The residents themselves believed they had benefitted from city life and now had better job opportunities and higher incomes than they had in the countryside.

Children under one are at the greatest risk from watery diarrhoea. Between the ages of one and four, however, bloody diarrhoea and persistent diarrhoea with nutritional wasting, which require antibiotic treatment, become the greater problem.

Watery diarrhoea is best treated with an oral rehydration solution. Bangladesh is now self-sufficient in the production of oral rehydration salts (ORS). While most people know that this solution can prevent death by dehydration from diarrhoea, only a quarter of them report using ORS for the last episode of diarrhoea. However, they may use it for the critical cases.⁽¹¹⁾



Life Cycle

Hygiene, Water and Sanitation

Clean water is now available to over 80% of all households, a remarkable achievement over the past twenty years. Unfortunately, little effect has been shown so far on diarrhoeal disease incidence rates.

Over 80% of the population use tubewell water for drinking purposes but only 12% use it for all their needs.⁽¹²⁾ Given the abundance and easy accessibility to surface water, most people still use ponds and other natural water ways for washing, thereby exposing them to diarrhoeal and other water-borne diseases.

Only 6% of all households have a sanitary latrine

Only 6% of households in the country have access to sanitary latrines. A third use a fixed place for defecation which leaves the excreta exposed. In fact, over 28,000 tons of human faeces deposited in the public domain every day. Intense crowding and an average daily temperature of 30°C, as well as a high humidity, facilitate the growth of micro-organisms and disease transmission. In addition, although many people see drinking tubewell water and bathing as activities that promote health, few understand the health benefits of latrines.

Malnutrition

Over 60% of children in Bangladesh are most likely to be malnourished during the second year of life.⁽¹³⁾ This is not only because of lack of food but also because exposure to disease, in particular diarrhoea, contributes to malnutrition.

Poverty and Malnutrition

For the poorest Bangladeshi, hunger is a life long condition. Malnutrition is probably the major underlying factor in the deaths of very poor children.

The poorest 10% of families spend between 75% and 80% of their total household income on food, generally consume less than 80% of the minimum calorie requirements and are acutely malnourished as a consequence. The middle 70% of the population spend 60% to 75% on food and have chronically malnourished children.⁽¹⁴⁾

Situation Analysis - Bangladesh

In October, when people are waiting for the new harvest, food supplies in the poorest families drop to crisis levels. During floods and cyclones, the poorest families are again hit hardest by shortages in food (see panel, "Mora Kartik").

The Child Nutritional Status Survey of 1989-90 reported that over a third of all children were severely stunted and another third were moderately stunted. Two thirds of all children were underweight and more than 14% were wasted.

Malnutrition prevalence is lower for children 6-11 months of age but reaches a peak between 12-23 months of age and stabilizes at around three years of age. Malnutrition starts at birth, with almost a third to a half of the children

Mora Kartik

Traditionally, Bangladesh had two (nutritional) lean seasons, one in late September to early November, the other in late March to early May. With the expansion of irrigation and boro cultivation, the early summer season is no longer so difficult. But in the autumn, after the planting of the aman crop and with the harvest still a month away, is a period known as Mora Kartik, a time of great hardship for most of those living in the countryside. In Bangla "Mora" means "dead", but in this phrase it refers to the hunger and deprivation of "Kartik" - the autumn.

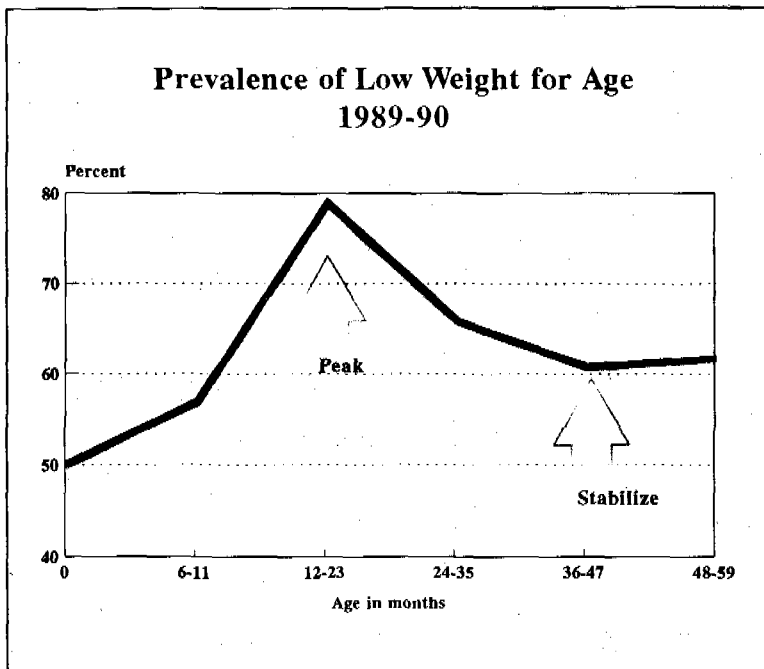
A 1991 survey found that during normal times 2% of laborer households reported going without work for 4-7 days a week. During Mora Kartik, this level rose to 62%. The average daily wage rate also dropped by 30% during October compared to other months.

To cope with this annual shortfall in income, poor people use a number of strategies. Cutting down on meals is common. In the 1991 survey 18% of households reported eating only 1 meal a day for 1-3 days a week, while 9% only ate 1 meal a day for 4-7 days a week.

Once the remaining food stocks have been eaten, laborers need money to buy food. They are often forced to sell off household items and farm animals or to borrow money at high interest rates. There is also a custom of selling off future labour at a lower than normal rate. These practices mean that even after the end of Mora Kartik, the family will still face many months of hardship while the debt is being repaid or while they work with little or no income.

(Based on "The Anatomy of Mora Kartik: Enquiry into the Economic Health of the Countryside", BIDS, 1991)

Life Cycle



being born underweight. Inappropriate breastfeeding, early introduction of weaning foods and inadequate hygiene expose the child to risk of infection and diarrhoea. This risk increases until two years of age and then stabilizes at around three years when the child is able to feed herself, move around and ask for food.

About 58% of children from rural areas were stunted compared to 44% for urban children. No significant difference was found in the nutritional status of the male and female children. The survey

found a significant correlation between household income, household expenditure, maternal literacy and diarrhoea and the nutritional status of the child.⁽¹³⁾

Vitamin A and Blindness

Every day almost 100 children go blind in Bangladesh because of vitamin A deficiency. More than half of these die within a week of being blinded. Less severe vitamin A deficiency affects one million children between the ages of 6 and 72 months.⁽¹⁵⁾

The distribution of vitamin A capsules to children under six years started in 1973 but a recent survey reported only a 35% coverage of the target children. Nevertheless, data suggests that night blindness has declined from 3.6% in 1983 to 1.78% in 1989.⁽¹⁶⁾

Effect of Vitamin A on Childhood Survival

While the effect of vitamin A status on mortality and morbidity in childhood remains controversial, major reductions in mortality in children 12-71 months have been found in different trials in three different countries. In Tamil Nadu, India, a well-executed, low dose trial using weekly supplements showed a mortality reduction of 54%.

Two further community trials in Indonesia and Nepal demonstrated a 30% reduction in mortality.⁽¹⁷⁾ While further research may be needed to draw conclusive evidence, the health authorities in Bangladesh have decided that it is important to provide vitamin A supplementation.

Vitamin A reduces child mortality by a third

Iodine Deficiency

A lack of iodine causes a range of disorders from cretinism to goitre. Studies from neighboring countries have shown that iodine deficient children are slow learners and are usually the first to drop out of schools. Iodine deficient women are more likely to give birth to low birth weight babies who have increased risk of illness and death.

Iodine deficiency is a new and rapidly growing problem

A 1982 study by the Institute of Public Health Nutrition (IPHN) concluded that 38% of Bangladeshis suffer from iodine deficiency disorders. In some of the northern districts, the prevalence rate is as high as 50% to 80%.

Legislation passed in 1989 requires that all salt sold for human consumption be iodized by 1993. In the meantime, lipoidal injections have been administered to 1.4 million people in the areas most affected. However, recent studies indicate that such treatment is effective for a shorter time than was previously thought.

Measles and Other Immunizable Diseases

Vaccine preventable diseases account for almost a fifth of childhood mortality. Prevalence and incidence surveys from the 1980s on EPI diseases show that about 10,000 cases of paralytic polio occur each year, a fifth of these in infants. Measles account for 2.6 million cases and 45,000 deaths annually. Neonatal tetanus mortality was assessed at 13 per 1000 live births - 52,000 deaths annually.

Bangladesh has surprised the world by rapidly increasing its immunization coverage from 2% in 1985 to about 70% in 1990. A 1991 independent coverage evaluation survey, supervised by WHO, found that of all children 12-17 months of age, 86% had received BCG, 69% three doses of DPT and OPV and 65% measles vaccine. The coverage of tetanus toxoid for women was assessed at 74%.

Life Cycle

The high levels of immunization are expected to halve measles deaths, cut pertussis mortality by 45% and halve the incidence of paralytic polio.

The dropout rates for multiple dose vaccines have also declined, showing that people increasingly accept and see the need for immunization

The Making of a Miracle

In 1985, with immunization coverage levels at only 2%, the government of Bangladesh realized that a new strategy was needed if Universal Child Immunization was to be achieved by 1990.

A new service delivery system was put into place stage by stage, beginning with eight upazilas and eventually covering all 460. The two wings of the Ministry of Health and Family Planning came together in this process and family welfare assistants became vaccinators. NGOs were also active in delivering vaccinations and providing training for both vaccinators and administrators.

In 1986, an EPI communication plan was finalized to support this expansion. This plan set out the three major steps to be taken to increase demand for immunization - advocacy, social mobilization and programme communication.

For advocacy, local politicians and national and international sports and entertainment personalities were used to create awareness of EPI and persuade the public of the importance of immunization.

A number of government ministries became crucial allies for social mobilization. The Ministry of Education incorporated EPI into the school curriculum and involved students in a number of EPI activities. The Ministry of Information designated three minutes of free, prime time on radio and television every day. The Ministry of Religious Affairs sent an information package to 200,000 imams throughout the country, and special sessions on EPI were held with imams in some upazilas. The Bureau of Health Education supported newspaper ads, banners and television and cinema slides for announcing EPI events.

Journalists and newspaper editors were informed about EPI issues and local Rotary clubs raised funds as part of Rotary International's Polio Plus campaign. Scouts, Girl Guides and other service clubs contributed to the campaign while manufacturers and retailers provided free advertising space on their products and displays.

Situation Analysis - Bangladesh

Many NGOs supplied communications materials to support the campaign. It is doubtful that the immunization programme could have achieved such a high level of coverage in such a short period of time without their strong support.

Another component of the plan was programme communication which targeted specific groups, the best example of which is the "moni" logo. "Moni" was not only used on posters and billboards, in newspapers and on television, but also on cars, buses, trucks and rickshaws.

Songs, poetry and theater are the most popular forms of entertainment in Bangladesh. Consequently, village theater productions, based on the theme of immunization, were organized throughout the country and were televised.

Posters and signs bearing EPI messages were disseminated widely. But feedback showed that there was an over-reliance on printed material. Research also revealed that in urban areas, where interpersonal communication channels are very different from those in the rural areas, people were simply not getting information regarding the place and time of immunization sessions. Instead, public announcements via microphones was found to be a better way to get information out to potential clients.

Vaccinators are the most important interpersonal communicators in the EPI process. They are the main source of information on EPI and other health services and their communications skills are essential in getting people to complete the full course of vaccinations. But a 1991 needs assessment revealed that despite previous training, many vaccinators are poor communicators and counsellors and that a major retraining effort must be undertaken to improve their behaviour with clients.

The success of EPI was dramatic and the same communications strategy is now being applied to other areas. Basic education and sanitation are the two areas that have been given priority, as well as an extended version of EPI called "EPI Plus".

EPI Plus

Besides raising immunization levels to 70%, EPI also succeeded in creating a delivery system that reaches every corner of the country. Furthermore, mothers see the value of EPI and are prepared to make the extra effort to bring their children to be immunized. The EPI distribution system can therefore be used for other interventions:

Life Cycle

- Plus 1 Provision of vitamin A to children under six years of age
- Plus 2 Promotion and protection of exclusive breastfeed-ing;
- Plus 3 Case management (Control of diarrhoeal diseases)through timely rehydration and continued feeding);
- Plus 4 Provision of family planning services;
- Plus 5 Screening and referral of high risk pregnancies;
- Plus 6 Provision of iron folic acid for the prevention and management of anaemia.

Mortality rates for girls continue to remain higher than those for boys.

School Days

If a child lives to the age of five, she has survived the hardest period. By the time she will reach school age, her likelihood of dying has decreased. Nevertheless, the mortality rate for girls after the age of five, even before the childbearing years, remains higher than for boys.

Current Status of Education

The education system in Bangladesh does not yet have the capacity to educate all the children in the country. Not only is there a lack of schools but the quality of education itself is poor. The result is that Bangladesh has one of the lowest adult literacy rates in the world.

Poor Quality

The quality of education is low because of poorly trained and supervised teachers, high teacher absenteeism, a curriculum that is not relevant to the needs of the students and little time spent on actual teaching/learning.

Low Retention and Completion

Although about 77% of children enroll in school, only about half of them attend regularly and almost half of them drop out altogether, especially in the first two years.

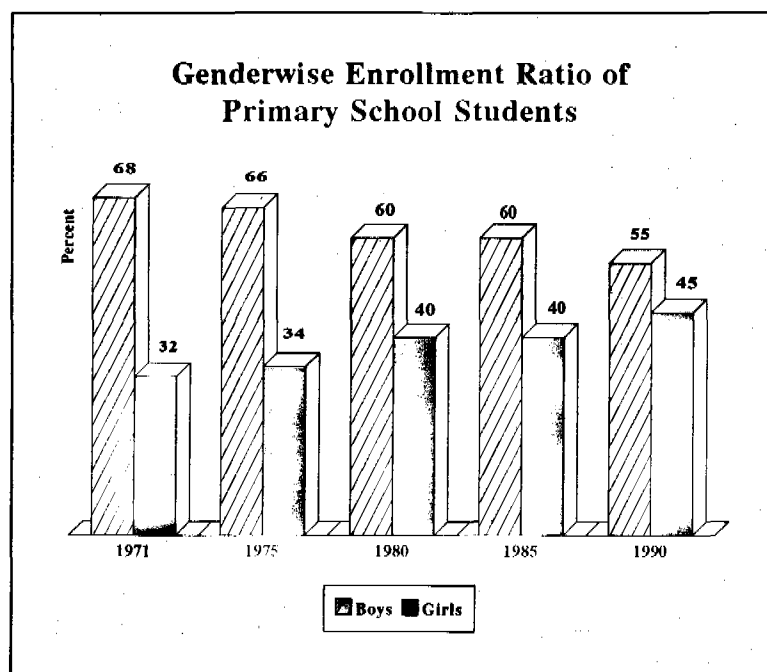
Situation Analysis - Bangladesh

About 35% of those who enter the system in grade I finish the five years of primary school and a mere 5% are able to pass the HSC examination in grade XII.⁽¹⁸⁾ These rates are amongst the lowest in Asian countries and under-developed countries having a GNP per capita below \$400.

Conventional wisdom is that poverty and the need to help parents are the main reasons why children drop out of school. Several major NGOs which have extensive experience in adult education, however, provide a contrasting viewpoint. Poor parents are highly motivated for their children's education as they feel it is one of the means of escaping poverty. The more dominant reasons for the high dropout rate are distance to school and poor teaching and learning situations.

Fewer Girls Than Boys Attend School

Girls enroll at a slightly lower rate and drop out faster than boys. However, their enrollment is steadily increasing and the boy-girl ratio in primary schools is currently 56:44. Nevertheless, only 22% of adult women are literate compared to 43% of men.⁽¹⁸⁾ The lack of educational attainment of women has serious implications for the welfare of the family since it restricts their opportunities for work and reduces their effectiveness as mothers. It leads to poor health, nutrition and sanitation practices and limited social and economic prospects, which, in turn, has a negative effect on infant and maternal mortality.



Girls' enrollment is increasing

Life Cycle

Young Motherhood

Women and Purdah

As girls approach menarche, they are kept more and more within the confines of the household while boys are expected to take part in economic activities outside the home.

The traditional belief is that a woman should observe *purdah*, which means she should not come into contact with anyone outside her close family. These restrictive traditions are not so widely observed, however, and women have varying degrees of social interaction, depending on their family situation. Nevertheless, at each stage of life, a woman must have a male protector who will act for her in important matters. In childhood she depends on her father, after marriage on her husband and when widowed, on her son. In each of these relationships the woman may be dominated by the man so that she is susceptible to exploitation and, in some cases, abuse.

The observance of purdah is on the decline. Economic pressure is forcing women to work outside the home

The strict observance of *purdah* is on the decline. Families need a sufficient income in order to keep their women in seclusion and poor families may be forced to have their women work outside the home. Female garment workers are now a common sight on the streets of Dhaka and there is no shortage of applicants for the post of Family Welfare Assistant (FWA) and other positions in the Government, businesses and NGOs.

Dowry is emerging as a new social problem in Bengali Muslim society

Marriage

The age at first marriage for women is going up but this does not yet have a great impact on fertility since half of all women are married by the time they are 18 years (see "Demographic Situation" for further detail).

Dowry

The practice of demanding dowry from the girl's family has been a recent development in Bengali Muslim society. In the past, amongst rich Muslim families, the groom provided a bride price in the form of jewellery and other

gifts. Only amongst Hindus did the family of the bride provide the dowry.

Newspaper reports suggest that dowry payment is often a source of conflict in the family and that the bride suffers most in these situations, either at the hands of her husband or her in-laws.

Widows

About 9% of the total female population are widows.⁽¹⁹⁾ Those with no support from adult children or their family of origin are in a very weak position, both socially and economically, and they may become destitute. Divorced women, especially those with young children and those who are not taken back into their family of origin, are similarly vulnerable.

Family Planning

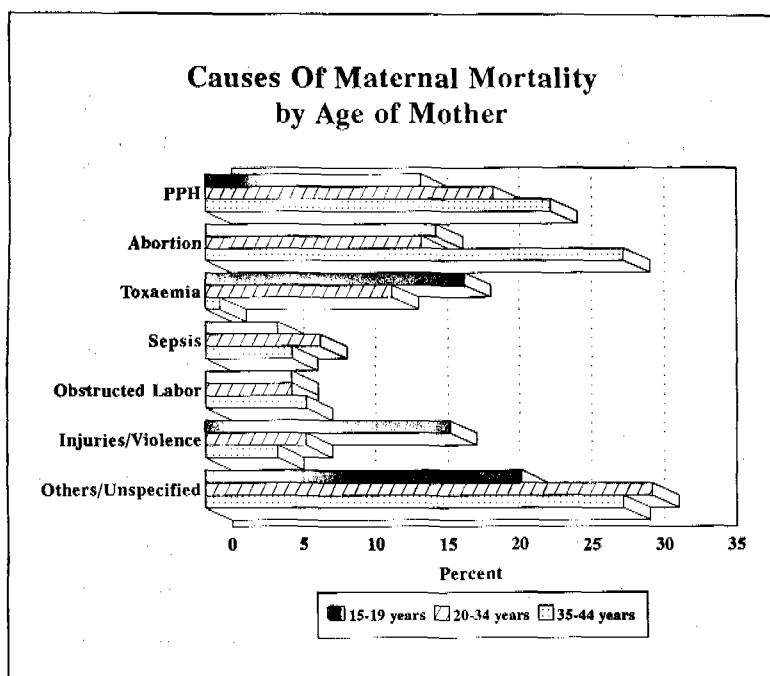
The family planning programme has been very successful. The number of couples who use contraceptives has steadily risen over the last 15 years from about 7% in 1975 to 40% in 1991. Contraceptive use is much higher in urban than in rural areas (30% for rural and 46% for urban), rises steadily from under 15% for those below 20 years to 25% for women 20 -24 years, peaks at 44% for women 30 -39 years and declines to 22% for women 45 to 49 years.⁽²⁰⁾

Conventional wisdom suggested that contraceptive prevalence would not rise unless significant economic development and improved education had taken place. Bangladesh has proven this conception to be wrong.

Unwanted Pregnancies

According to surveys, most women would prefer to have two or three children, with at least one son. But the total fertility rate is 4.7 children per woman. Without access to family planning, many women resort to traditional methods to end unwanted pregnancies. Infection after such a procedure is common and self-induced abortions account for almost a fifth of all maternal deaths.⁽²¹⁾

Life Cycle



Too Little Food, Too Many Babies

The Bangladesh Fertility Survey (1989) found that women aged 20 to 24 have a median age at first pregnancy of 18 years. In other words, half of this age group have their first child by the time they are 18 years. Thirteen percent of women under 20 have already had two children. By the time a woman is over 35, she has had an average of five babies. With each successive pregnancy,

her body, which is already underweight and anaemic, becomes further depleted and her risk of dying becomes higher.

Care for the Mother

There are few pre-natal and obstetric health care facilities. Only a very small proportion of women receive such care and even fewer go for a regular series of check-ups. Less than half of all clinics and health centres are equipped or staffed to help a woman who has an obstructed labour, is hemorrhaging or has a serious infection.

Bangladesh's maternal mortality rate is one of the highest in the world

About 10% of births in rural and 45% in urban areas are attended by a medically trained person. Traditional birth practices of family members and untrained attendants are often responsible for infection and hemorrhage. Not many people know the danger signs for a woman who is pregnant or in labour. By the time help is sought, it is often too late.

Maternal Mortality

Early and closely-spaced pregnancies, a poor nutritional status and poor health care lead to Bangladesh having one of the highest maternal mortality ratios in the world, 600 per 100,000 live births.

Situation Analysis - Bangladesh

The Cry of a New Baby

The cycle begins again with a mother who is too young and poorly nourished, has little or no life skills and education to help her improve her own or her children's lives and gives birth to another girl baby who is underweight, vulnerable and whose arrival may be bemoaned rather than celebrated.

References

- (1) World Bank (1991), Staff Appraisal Report: Fourth Population and Health Project, Report No. 9400-BD
- (2) Based on under-5 mortality profile, ICDDR,B, Matlab comparison area, 1986
- (3) UNICEF (1992), State of the World's Children 1992
- (4) WHO (1991), Coverage Evaluation Survey, February 1991
- (5) Goodburn, E. (1990), Feeding During Illness in Bangladesh: A Study Based on a Review of Recent Literature, prepared for UNICEF (unpublished).
- (6) Based on ICDDR,B, Demographic Surveillance System (personal communications)
- (7) UNICEF (1990), Acute Respiratory Infections in Children of Bangladesh: Focus Group Discussions on Women's Perceptions and Practices, principal investigator: B. Parker, Ph.D.
- (8)- (1990), The Fourth Five Year Plan, 1990-95, Planning Commission and Ministry of Planning, Government of Bangladesh
- (9) Center for Urban Studies/UNICEF (1990), The Urban Poor in Bangladesh: Comprehensive Summary Report
- (10) Based on ICDDR,B, Matlab comparison area, 1986
- (11) NCDDP/UNICEF/WHO (1991), Diarrhoea Management in the Home: A Survey of Household Case Management, October - December 1990, Control of Diarrhoeal Disease Programme, Directorate General of Health Services, Government of Bangladesh
- (12) DPHE/UNICEF/DANIDA (1986), Towards a Strategy for Health Promotion

Life Cycle

(13) *Bangladesh Bureau of Statistics (1991), Report of the Child Nutritional Status Survey, 1989-90*

(14) *Rahman, H.Z. and Hossain, M. (1991), The Anatomy of Mora Kartik: An Enquiry Into the Economic Health of the Countryside, October 1991, Bangladesh Institute of Development Studies*

(15) *HKI/IPHN (1985), Bangladesh Nutritional Blindness Study, 1982-83: Key Results*

(16) *IPHN/UNICEF (1990) Nutritional Blindness Prevention Programme Evaluation Report, 1989*

(17) *Gadomski, A. and Kjolhede, C. (1988), Vitamin A Deficiency And Childhood Morbidity and Mortality: Scientific Background and Implications for Child Survival, Johns Hopkins University, School of Hygiene and Public Health, Institute for International Programs, Occasional Paper No. 4*

(18) *World Bank (1988), Bangladesh: A Review of Selected Issues in Education, Report No. 6770-BD*

(19) *Bangladesh Bureau of Statistics (1991), 1991 Statistical Yearbook of Bangladesh*

(20) *Mitra, et.al. (1990), Bangladesh Contraceptive Prevalence Survey, 1989*

(21) *Fauveau, V. and Blanchet, T. (1989), "Deaths from Injuries and Induced Abortion Among Rural Bangladeshi Women", *Social Science and Medicine*, Vol. 29, No. 9*

The Development Environment

Demography

The Demographic Situation

The population of Bangladesh is growing at a rate of 2.2% and would double in less than 35 years. But some promising trends are taking place. First, a significant fertility decline has occurred. Second, since the 1980s, a gradual decline in infant mortality has taken place. Third, the use of contraceptive methods has risen significantly and more women say they want only two or three children.

Current Fertility Levels

Bangladesh has a weak and unreliable vital registration system and surveys and censuses which rely on memory recall, all of which may result in an over or under-estimation of fertility. Nevertheless, a general agreement exists that fertility levels have declined in the last 15 years, although not as significantly as previously believed. The exact rate of and reasons for the decline are unclear, however.

Fertility levels have declined

Surveys and censuses conducted in Bangladesh in the past three decades suggest that, up until the end of the 1970s, the number of children a woman could expect to bear throughout her lifetime averaged around seven. By 1985, this figure had fallen to six and, by the end of the 1980s, to less than five. The 1991 Contraceptive Prevalence Survey suggests that the total fertility rate (TFR) is now down to an average of 4.7 but, as mentioned above, this may be a slight underestimate.

What has brought about this dramatic decline? To consider this question, it is necessary to review the various ways in which fertility can be modified.

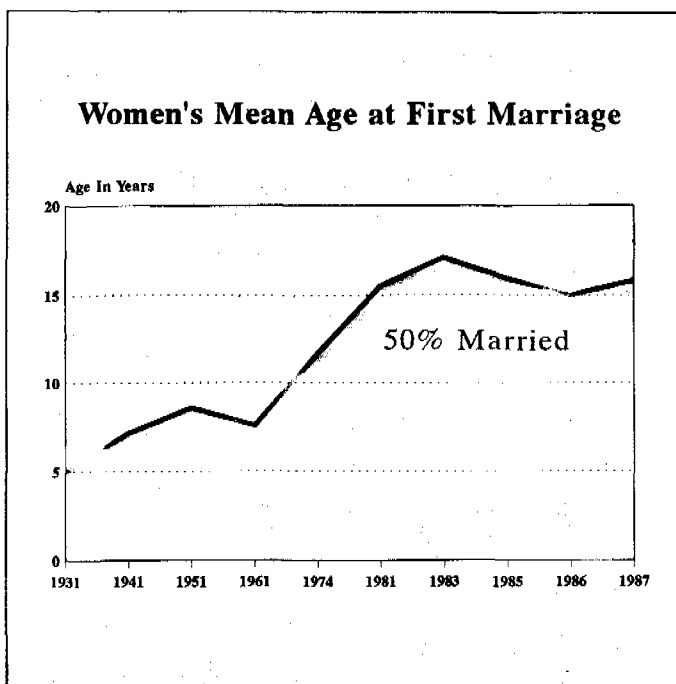
In the context of Bangladesh, where there is no significant childbearing outside marriage, possible factors are:

- women delaying their age at first marriage, resulting in delayed age at first birth and a shortened reproductive period, resulting in lower fertility,
- an increasing number of women deciding not to marry at all,

Demography

- women having more difficulty conceiving and bearing a child due to their declining nutritional status and an increase in infectious diseases, and
- an increasing number of women using contraceptive methods in order to space or limit pregnancies.

With regards to the first factor, there has, indeed, been a change in mean age at first marriage. Data from various censuses indicate that the mean age at marriage for women increased gradually from around 12 years in 1921 to 16 years in 1974 and finally to 18 years in the mid 1980s. The mean age at marriage for men only rose by three to four years during this timespan (from 22 to 26 years), resulting in the narrowing of the age gap between husbands and wives.



The impact of this delay in age at marriage can be overestimated if it is assumed that the reproductive span of a woman who married later is on average shorter than that of a woman who married earlier. Many of the women marrying at age 11, 12 or 13 years in the 1920s would not have yet been fertile, that is, not yet reached menarche. Indeed, they may have not been cohabitating with their husbands for the first few years following the formal marriage ceremony. In fact, the reproductive span of a woman may be reduced by as little as three years due to the changing

marriage patterns and these are three years at an age when fertility is not at its highest. However, by delaying marriage, age at first birth will also be extended which has great implications for improving the survival rate of children and mothers.

Regarding the second factor, marriage is still virtually universal in Bangladesh since only about 2% of women over 30 years remain single.

Assessing changes in the nutritional status of Bangladeshi women and its impact on fecundity is more difficult. There have been few surveys on food consumption and maternal anthropometric indicators. Those which have tried to assess food consumption suggest that the slow growth in food production combined with rapid population growth resulted in a decline in average calorie and protein consumption of around 6%. It may be assumed that this decline has continued in the face of rapid population growth.

Available evidence on nutritional status suggests that the problems of acute and chronic malnutrition are particularly prominent among young children after the first year of life, though stunting is present amongst four out of five children six to seven years of age and is more common amongst girl children.

As mentioned above, it is very difficult, in the absence of adequate data, to speculate on whether or not the recent declines in nutritional status could account for a sufficient deterioration in the childbearing capacity of adult Bangladeshi women. However, it seems highly improbable.

Family Planning

The fourth factor, the use of family planning methods, seems to be the most plausible explanation for the fertility decline in the 1980s. The Government's First Five Year Plan (1973-78) promoted the use of contraceptives and called for vasectomy and tubal ligation to be made free of charge at family planning clinics and hospitals. It was hoped these permanent methods would prevent 25-30% of all births. The Plan even alluded to the possibility of compulsory sterilization after the second child, but this was not pursued, possibly due to the negative political consequences of a coercive sterilization program occurring in India at the time.

Irrespective of the Government's enthusiasm for the family planning program, the proportion of married couples

Demography

using any contraceptive method at the time of the 1975 Bangladesh Fertility Survey was only 8% and started to increase by the mid-1980s, rising to a level of 31%. It increased further to its present level of 40%. This recent dramatic rise may be explained by an end to transient shortages of contraceptive supplies.

Increased use of contraceptives has led to a decline in fertility

Most models which try to examine the reasons for the fertility decline in Bangladesh attribute the increase in contraceptive use rather than delayed age at first marriage or declining fecundity to the decreasing fertility rate. Whether this fertility trend will continue and lead to a more "acceptable" population growth rate, is uncertain.

The family planning program has relied largely on oral pills, although now other hormonal methods, such as injectables (3-monthly Depo-Provera) and Norplant (implants placed under the skin, effective for 5 years) are becoming more popular. However, these long-term methods place different requirements on the health service in terms of skills and follow-up.

An old rule-of-thumb in regard to family planning programs is that a contraceptive prevalence rate (CPR) of 40% is equivalent to a Crude Birth Rate (CBR) of about 30 per 1,000 population - the "40-30 rule" - which suggests that Bangladesh needs to continue increasing its CPR well above its present rate since a CBR of 30 per 1,000 still leaves the country with a rate of natural increase in the order of 2% per year and a doubling time of 35 years. In order to extend the doubling time to, say, 70 years, the CBR would need to be not higher than 20 per 1,000 population.

Historical Mortality Levels

The mortality trend over the past number of years has been less stable than the fertility pattern. From a high crude death rate (CDR) of 45 per 1,000 population during World War I (resulting in a population growth rate of only 0.5%), the level gradually declined until about 1970 (with the exception of the 1940s when a famine broke out in 1943 and partition from India occurred in 1947). A devastating cyclone in the late 1970s, followed closely by the war of liberation from West Pakistan in 1971, resulted in the CDR increasing from around 15 per 1,000 to over 20 per

Situation Analysis - Bangladesh

1,000 population. The recovery was again interrupted by a flood induced famine in 1974. Thereafter, the CDR settled at around 12 per 1,000 population.

Patterns of Infant and Child Mortality

The infant mortality rate in Bangladesh is amongst the highest in the world. It declined from a level of 200 per 1,000 live births in the early part of this century to 150 per 1,000 in the 1970s. The 1980s produced a steeper decline to around 100 per 1,000.

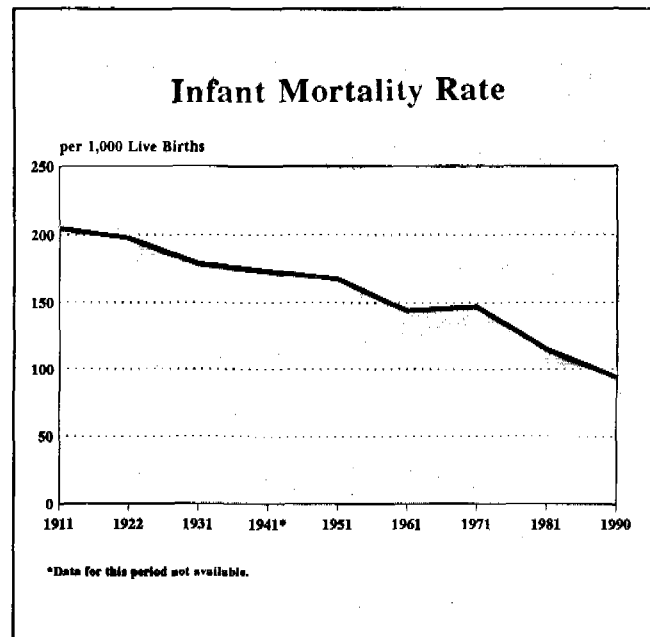
As might be expected, infants and children are particularly susceptible to the environmental catastrophes which have afflicted Bangladesh periodically. The famine and the war of independence in the early 1970s resulted in brief but major increases in infant and child mortality of 30-50%. It has often been suggested that in times of hardship, female children suffer disproportionately, as do adult women, although the data from the mid 1970s do not indicate any such discrimination. In "normal" times, however, there is convincing evidence that many female children in Bangladesh are disadvantaged, compared to their brothers, in terms of access to food and health care.

Causes of Death

Data on the major causes of deaths in post World War II Bangladesh is limited. It seems reasonable though to assume that patterns documented in the 1950s reflect those of earlier decades.

In the 1950s, malaria, typhoid, diarrhoeal diseases (including cholera) and respiratory infections (particularly tuberculosis) each accounted for about 15-17% of deaths (to people of all ages), totaling about two-thirds of all deaths.

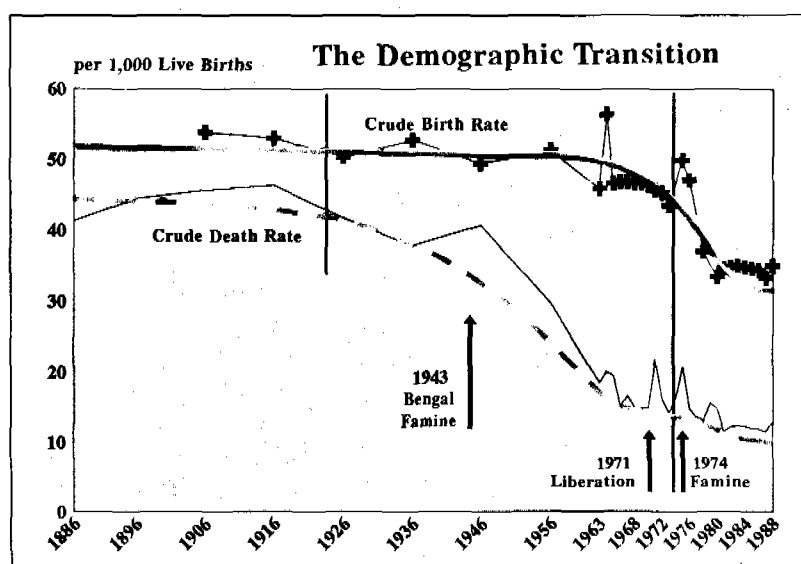
In the 1960s, several public health measures were introduced, such as improving health facilities nationwide and implementing a malaria eradication campaign. By 1970,



Demography

malaria was almost eliminated. Smallpox was completely eradicated in 1976 although it seemed to have been a minor cause of death (1% of total deaths in the 1950s).

By the mid 1970s, a number of important infectious diseases such as typhoid were playing less important roles. Diarrhoeal and respiratory diseases, however, continued to persist since their elimination requires major environmental improvements and behaviour change.



Compared to adult deaths, infant and child mortality have a different causal pattern. Malaria has probably been less significant, especially for younger children, but neonatal tetanus has persisted as a major cause of infant deaths. One of the underlying reasons for the high tetanus death rate amongst infants is shared with the maternal mortality causes, namely the unsanitary conditions found to exist during childbirth. Studies show that at least two thirds of births in Bangladesh are not attended

by a trained medical attendant and few of the remaining one third are delivered under adequate hygienic conditions.

Apart from the above, the remaining major causes of mortality are common to all ages, namely the diarrhoeal and respiratory diseases and fevers. The recent expansion of the national immunization program for infants and pregnant women is expected to have a significant impact on several diseases but, most importantly, measles and tetanus. Furthermore, the widespread acceptance of family planning, resulting in fewer pregnancies, especially amongst high risk teenage girls and women over 35, will reduce infant and maternal mortality further. However, proper antenatal care and access to skilled birth attendants with the capacity to refer high-risk cases to an appropriate health clinic is still lacking in Bangladesh.

The Development Environment

Economy



Economy

Bangladesh is one of the poorest countries in the world. At present, its GNP per capita is \$180 while its annual rate of economic growth is 2.7%. The experience of newly industrializing countries shows that financial investment in education and health is an important factor in economic development. But Bangladesh has made little investment in human capital, despite the fact that its people are the country's most obvious natural resource.

Bangladesh has a per capita GNP of US\$ 180

Changes in the Economy

The country is still a predominantly rural and agricultural society but this is slowly changing. The agricultural sector's share of the GDP declined from 58% in 1972 to only 43% in 1989. And while agriculture grew annually at a rate of 4.2% in the 1970s, during the 1980s the annual growth rate was only 1.6%.

Similarly, the manufacturing sector declined from a growth rate of over 5% annually in the 1970s to a low of less than 2% in the mid 1980s. The exception has been the dramatic growth of the ready-made garment industry.

The areas of the economy which have shown the greatest growth rates are the construction and service sectors. The former, which includes public utilities such as electricity, gas and water, grew at about 8% annually throughout the 1980s. The service sector, consisting of banking, insurance, public administration and defence, now accounts for 40% of the GDP and grew at a rate of 7% a year in the late 1970s, slowing down to just over 4% per annum in the 1980s.

Savings and Investment

The ratio of investment to GDP fell from a high point of about 15% in 1980 to 11% in 1989. In comparison, India had a ratio of 22% between 1985 and 1989 and Sri Lanka a ratio of 24% in 1988. The public investment ratio is also disappointingly low and falling, from about 8% in 1980 to only 5% in 1990.

The principal underlying factor in the low investment ratio is the domestic savings ratio which is amongst the lowest

Economy

in the world, only 1 to 2% during most of the 1980s. For comparison, the rate in India and Sri Lanka was 20%.

Foreign aid finances over 80% of the ADP

The role played by foreign aid is also important since it accounts for about 8% of the GDP and is used to finance over 80% of the Annual Development Programme. The GDP-aid ratio is, however, already falling and may decline further because of competing demands for aid in an environment where aid absorption is a chronic problem for Bangladesh.

Exports

Exporting of non-traditional items, such as ready-made garments, which accounted for 37% of total exports in 1989, has grown significantly in recent years. Other areas of growth are leather goods, fertilizer, fish and shrimp while the export of jute has continued to decline.

Manufactured goods now constitute 77% of total exports which is perhaps related to the pressure on a limited supply of agricultural land and the opportunity of an abundance of labour.

Income Distribution

Over the last 20 years, income inequality increased, although only slightly. The biggest change in income distribution, however, was between urban and rural areas. In the mid-1970s, the annual per capita income was about 20% higher in urban areas, but by the late 1980s, it had risen to over 50%. The BBS Household Expenditure Survey suggests that between 1963 and 1989, income distribution improved in urban areas in that the income share of the top 5% of urban households dropped from 25% to 20%.

In rural areas, the changes of income distribution since independence have been very small. The top 5% of households increased their income share from 17% to 20% while the income share of the bottom 40% of households decreased from 20% to 18%.

Rural Bangladesh is not typically dominated by large landholders and even if ten acres were set as the maximum amount of land which could be owned, there would be

little land to redistribute to the landless. This suggests that even radical land reforms would not have a big impact on income distribution.

Poverty

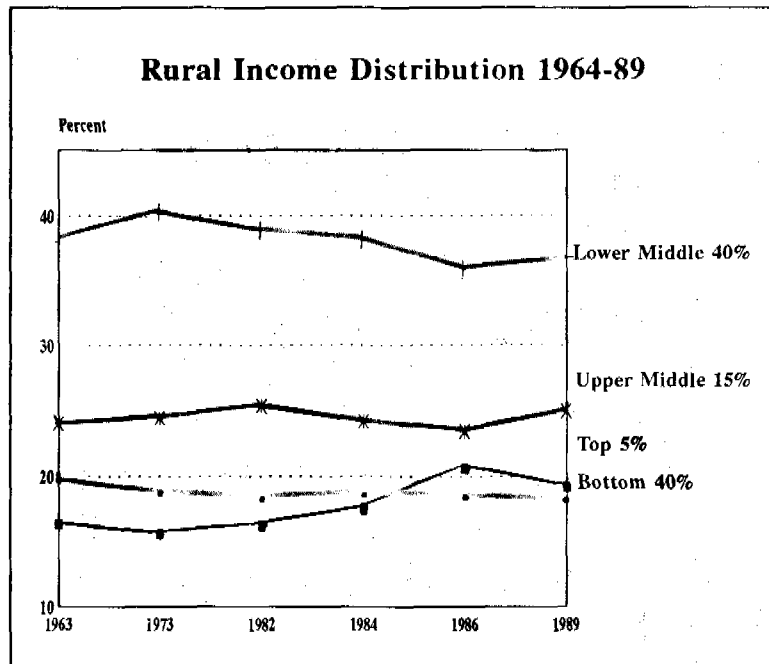
A recent BBS report shows that between 1985-89 the proportion of hard-core poor (defined as a per capita daily intake of 1805 kilo calories) in rural areas increased from 22% to 29%, findings which are supported by a BIDS survey of 62 villages. Studies of urban hard-core poor show a similar increase from about 19% in 1986 to about 26% in 1989.

In addition, BBS estimates that about 19% of the rural population live below what they term the "extreme poverty line", defined as a daily consumption of less than 1600 kilo calories.

The poorest of the poor have no land, little property and no access to capital. Their only asset is their physical labour which is often used to establish a patron-client relationship with those more fortunate (see the panel, "The Patron-Client Relationship"). Unfortunately, the demand for labour is seasonal in rural areas. Poor people are also susceptible to sickness and disease which severely limits their capacity to work.

Education and Income

Education is often mentioned as a way of improving the condition of the poor. Some interesting data on this subject has been gathered in Bangladesh. For example, studies have found that education has only a small effect on the incomes of agricultural families; however, it is more significant for rural families in non-farming occupations. In urban areas, on the other hand, education has a much clearer role in improving income.



Hard-core poverty has increased

The Patron-Client Relationship

The social organization of rural Bangladesh has traditionally been dominated by a patron-client relationship in which the client provides the patron with services, who in return offers the client employment and other general support, in particular during times of crisis. More prosperous peasants often fit into both roles; patrons to the landless laborers they employ, clients to local politicians, government officers and rich landlords.

But there are signs of change. Evidence suggest that the rich landlords and more prosperous peasants have been able to acquire more land at the expense of the small landholders. A major reason for this trend is the increasing population size which decreases the size of each parcel of land, making ti more difficult for the small famer to subsist. The pool of landless laborers thus increases further. It is feared that if this trend continues, the rich patrons will no longer have to provide for their landless employees, the number of day labourers would increase and those who are already poor would sink into unimaginable poverty. All of this would leave the poor and landless with less political and economic power than they already have and the rich would no longer feel any obligation towards them. The patron-client relationship, which in the past was the glue of rural society, would subsequently dissolve altogether.

However, there have been developments that might mitigate this situation. Some improvements in moderate poverty have occurred in the countryside and it is hoped that this group of middle peasants will form a stable basis for rural society. Also, there is evidence that the rural poor have begun to acknowledge that united action can improve their bargaining position. Many NGOs have developed programmes that encourage them to work together to ensure that they receive just and fair treatment, both politically and economically. Also, it seems that it is predominantly the rural landless poor who are moving into the urban areas to take up work in the newly emerging garment industry. More opportunities for employment in urban areas will certainly help relieve the pressure in the countryside. Another trend is the provision of credit for the poor. NGOs such as the Grameen Bank have shown that with access to even small amounts of credit, the landless have been able to improve their economic position substantially.

Some analysis of NGO work in Bangladesh concluded that the success of these organizations was not so much due to their creating a new social movement but rather due to their revitalizing the patron-client relationship which over the centuries has been a major means of survival for many Bangladeshi.

(Based on "Bangladesh Faces the Future", edited by O.D.K. Norbye, 1990)

Situation Analysis - Bangladesh

A 1991 study on workers in the garment industry found that about 70% of the workers were female, mostly poor migrants from rural areas. Forty-four percent had migrated to the cities during the last five years. More importantly, the authors found that female garment workers who had a primary education before they started working were hired at 50% more wages than those who had no schooling.

The Task Force Report of 1991 estimated that even at the present rate of growth, the percentage of jobs that require some education will rise from a current level of 20% to about 30% by the year 2000. If the economy grows faster than at present, the percentage would be even higher.

References

(1) Sen, B. (1991), *The Economic Context of Human Development in Bangladesh*, background paper prepared for 1992 UNDP Human Development Country Initiative, Bangladesh Institute of Development Studies (unpublished)

(2) (1991), *Report of the Task Forces on Bangladesh Development Strategies for the 1990s*, University Press Ltd, Dhaka

The Development Environment
Environment



Environment

Most of Bangladesh is located within the flood plains of the Ganges, Brahmaputra and Meghna. The catchment area of these three rivers is 1.5 million sq.km, only 7% of which is in Bangladesh.

The warm moist air of the monsoon sweeps up the Bay of Bengal from the Indian ocean, producing very high levels of rainfall during the summers. Seventy to 85% of the rainfall (ranging from 1,100 mm in the West to 5,500 mm in the North East) is concentrated in the monsoon season between May and September.

River Flow Peaks

The Brahmaputra starts rising in March due to snow-melt in the Himalayas and peaks first in the end of May or early June and then, due to heavy mosoons, in the end of August.

The Ganges begins to rise in May and June and peaks in mid-September, sometimes in August.

The Meghna, which carries only 10% of the flow of the Ganges and the Brahmaputra, peaks in August.

Types of Floods

The following floods are normally encountered in Bangladesh:

- **Flash floods** in the northern and eastern rivers which are characterised by a sharp rise in water level, followed by a quick recession;
- **Rain floods** due to high intensity of rains which generate runoff volumes of water in excess of local drainage capacity;
- **Monsoon floods** from major rivers which are the most common cause of floods and result in extensive damage; and

Environment

- **Floods due to storm surges (cyclone)** in the coastal area which cause widespread damage to life and property.

Floods in Bangla

In Bangladesh floods are a part of life and culture. The Bangla language distinguishes between two types of floods, *bonnaya*, those which are harmful, and *barshas*, those which occur seasonally and are necessary for a successful harvest. The annual *barshas* are the foundation of the nation's food chain since they deposit rich silt, thereby replenishing the agricultural land as well as bringing with them numerous fish which are a staple food for many Bangladeshi. Bangladesh's biggest challenge is to "buy in" on the good effects of the *barshas* while safe guarding the population from the more severe floods, the *bonnayas*.

Sequence of Floods

The sequence of floods normally starts with flash floods in the eastern hill streams during April and May. Monsoons occur in June, causing the Brahmaputra and Meghna to peak during July and August whereas the Ganges peaks during August and September. Heavy flooding occurs when the peaks of the Ganges and Brahmaputra coincide, but so far this has taken place only in 1988.

Increased Vulnerability

Bangladesh has the highest population density of all developing countries. With almost 47% of the GDP being derived from agriculture, land has become a precious commodity. Such is the demand for land that even the marginalized areas have been inhabited. Population pressure has also led to the destruction of forests resulting in soil erosion. All of these factors, high population density, inhabitation of marginal land, deforestation and soil erosion, increase the vulnerability of the population to floods and natural disasters.

The Floods of 1987 and 1988

The 1987 flood was the result of very heavy rainfall between July to September in northwest Bangladesh. This

led to severe flooding in the minor rivers. The situation was aggravated by a very high flood peak in the Ganges.

In contrast to the 1987 flood which was generated internally, the one in 1988 was due to heavy rainfall covering India, Nepal, Bhutan and Bangladesh. The flood peak of the Ganges coincided with those of the Brahmaputra and Padma, resulting in massive flooding which covered 80% of the country.

The Flood Action Plan

Following the floods of 1988, several studies were carried out to develop a comprehensive flood policy and programme for the country. The flood action plan of Bangladesh is an integrated development approach that works on 11 guiding principles (see panel, "The 11 Guiding Principles"). Some key principles include placing priority on areas with high commercial assets and a high population density, effective land and water management, involving compartmentalisation and drainage, improvement of flood forecasting system, construction of embankments on major rivers and controlled flooding to meet the needs of agriculture, fisheries, navigation and other environmental issues. The plan will be implemented in phases and is expected to be completed within the next 10 to 15 years.

High population density increases the vulnerability of the population to natural disasters and calamities

The Aftermath of the Cyclone

A Cyclone Review Group visited Bangladesh in June to assess the health impact of the cyclone that struck the southern coast of Bangladesh on April 29, 1991. Team members visited a number of the most severely affected regions and conducted surveys to assess the number of deaths that occurred both during and after the cyclone, factors affecting survival, prevalence of diarrhoea and water use patterns. In addition, the existing diarrhoea surveillance system, diarrhoea management in hospitals and clinics and effectiveness of relief efforts were assessed.

Environment

Mortality Rates

Mortality rates found in the field surveys were similar to those established by the government in their house-to-house surveys, suggesting that the latter's estimate of 139,000 deaths was a reasonably accurate. Mortality rates in the six weeks following the cyclone were similar or only slightly above mortality rates reported from rural Bangladesh during non-epidemic periods. Most deaths during the cyclone were a result of the tidal wave inundating low-lying villages, rather than from any trauma from the cyclonic winds. Although cyclone shelters, of which there were a limited number, did save lives, the percentage of people surviving because of shelters was small. Survival was largely attributable to access to high ground, a brick or concrete building of two or more stories or the ability to climb a tree and hold on until the tidal wave receded. Warning of the cyclone reached almost all persons in the devastated regions six or more hours before the storm struck. Most persons, however did not seek shelter until the cyclonic winds and water were upon them. Reasons for this include prior warnings that did not result in disaster, the long distance and inaccessibility of adequate shelter and fear of losing possessions if homesteads were abandoned.

Diarrhoea

Outbreaks of diarrhoeal illness following cyclone did occur. These were primarily dysentery caused by shigella and watery diarrhoea caused by vibrio cholerae. Both of these organisms cause epidemic diarrhoea during non-disaster periods and thus an association with the cyclone is difficult to establish. The massive increase in diarrhoea incidence reported by the National Diarrhoea Surveillance System is difficult to substantiate because the reporting system which was in use following the cyclone was substantially different from the one used before the cyclone. Oral Rehydration Therapy was widely used to treat patients with diarrhoea following the cyclone - the distribution system apparently worked well and there was considerable demand within communities for sachets of ORS. Inappropriate use of antimicrobial agents and intravenous saline was widespread. Drug supply to government health centers was erratic and the quantity of

essential drugs was not consistent with need, although it was better than that during non-disaster periods.

Safe Drinking Water

Availability of safe drinking water following the cyclone was a major issue and the tubewell system developed over the last 20 years appeared to function extremely well. Although damage did occur to tubewells, almost all were repaired and functioning within two weeks of the cyclone.

Relief after the Storm

The provision of health assistance following the cyclone was characterized by the active participation of non-government organizations. In contrast to previous disasters, the most recent of which was the flood of 1988, the distribution of aid was more decentralized and effective. More than 95% of the families interviewed received relief supplies.

Almost all tubewells were functioning within two weeks of the cyclone

Impact on Child Health

Despite the large number of deaths that occurred during the cyclone, its impact on child health in Bangladesh was modest in the short term and negligible in the long term. Although 75,000 or more children died during the cyclone, this figure must be put in the context of the more than 800,000 child deaths that occur in Bangladesh annually. Many of the latter deaths are preventable with the provision of minimal health measures, improved sanitation and adequate nutrition.

Refuge During the Storm

The deaths which occurred during this cyclone were as much the result of impoverishment and lack of adequate shelter as they were the result of "natural" events. Cyclones of equal or greater intensity will occur again at unpredictable intervals. Although improvements in warning and evacuation systems will help mitigate the toll of future cyclones (just as they did with this one), a general improvement in the standard of living as well as the provision of more two storied buildings such as schools and clinics is required if such tragedies are not to be repeated.

The 11 Guiding Principles

1. Phased implementation of a comprehensive flood plan aimed at: protecting rural infrastructure and controlling flooding to meet needs of agriculture, fisheries, navigation, urban flushing and annual recharge of surface and groundwater resources.
2. Effective land and water management in protected and unprotected areas.
3. Measures to strengthen flood preparedness and disaster management.
4. Improvement of flood forecasting and early warning.
5. Safe conveyance of large cross border flows to the Bay of Bengal by channelling it through the major rivers with the help of embankments on both the sides.
6. River training to protect embankments and urban centers.
7. Reduction of flood flows in the major rivers by diversion.
8. Channel improvements and structures to ensure efficient drainage.
9. Flood plain zoning where feasible and appropriate.
10. Coordinated planning and construction of all roads and railways.
11. Encourage popular support by involving community in planning process.

References

- (1) UNDP and Government of Bangladesh (1989), *Flood Policy Study*
- (2) World Bank (1989), *Bangladesh Action Plan for Flood Control*

The Development Environment Support Structure

Support Structure

Administrative Structure

The country is divided into four divisions, each having a senior administrative officer, called the Divisional Commissioner. Each division is divided into 64 districts or *zilas* (supervised by the Deputy Commissioner) which, in turn, are subdivided into 460 *upazilas* (sub-district), 4,339 unions, 14,376 wards (the latter used for electoral purposes only) and 85,650 villages. *Zilas*, *upazilas* and unions have their own *parishads* or councils, consisting of a combination of elected and appointed members. Urban local governments are called *pourashavas* in smaller towns and municipal corporations in the four largest cities.

Decentralization

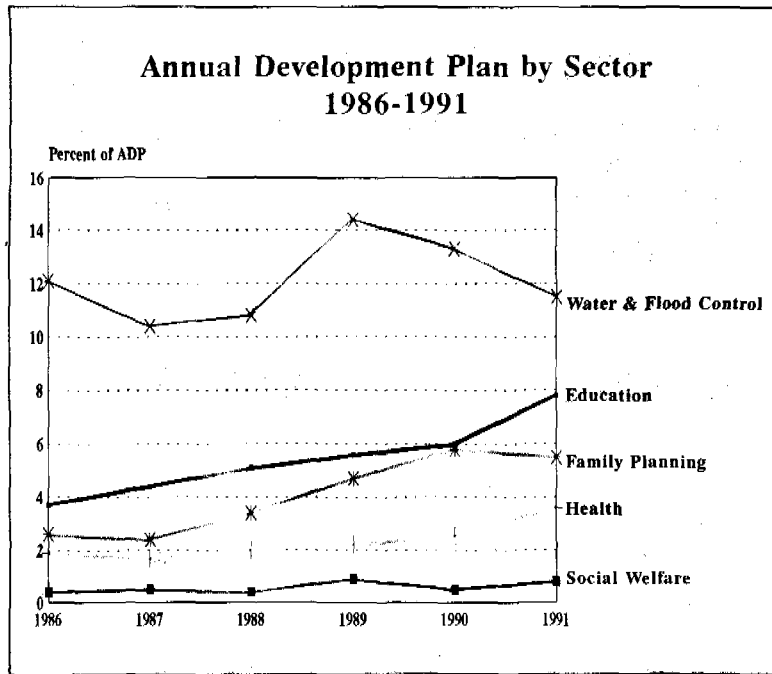
In the 1980s, the Government undertook a series of reforms with the aim of reducing the number of bureaucratic "layers" and making local government more autonomous and accountable.

During the 1980s, the flow of money from the central to the local governments decreased from 13% of total development expenditures to 3% in 1990.⁽¹⁾ The reason for such a decline was the Government's plan to gradually reduce the financial dependence of the *upazilas* on the central government and eventually make them financially self-sustaining. It was hoped that with more funds being collected and spent at the local level, the government would become more accountable and people would be more willing to pay taxes when they saw public revenue being spent to good effect in their own areas.

Unfortunately, *upazilas* have been unable to generate their own funds fast enough to make up for the loss in revenue from the central government. Also, some sources of revenue previously available to the unions have been transferred to the *upazila*, increasing their financial pressure. Without an increase in revenue, local governments will not be able to fulfill their development commitments. With the democratically elected government assuming power in 1991, the *upazila* structure has been abolished and the revenue base has been shifted to the union. It is

Support Structure

however too early to see the impact of this decentralisation initiative.



Government Allocations to Human Development

Although human development has often been given the highest priority in Government policy statements, this has not been reflected in public allocations and expenditures. Between 1983 and 1990, Bangladesh spent on an average around 3% of its GNP on human development. However, the trend seems to show a positive change in the 1990s.

An assessment of the Government's human development expenditures on various income groups indicated that the benefits of

the current expenditures were significantly higher for the 'not so poor' than for the poorer groups.

Education

Financial Allocations

On average about 2.3% of GNP is spent on education, compared to a regional average of 4.5%. Recurrent expenditures account for 16% of total recurrent expenditures. Total public spending averaged 9.3%, compared to an average of 13% for the region and 15% for all developing countries.

Primary education received less than 15% of total education allocations for the years 1973-80 but rose to 46% in 1981-85 and to the present 49%. Ninety-three percent of recurrent expenditures, however, are for teacher wages and benefits.⁽²⁾

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The Formal Education System

The formal system of education consists of five years of primary school, seven years of secondary education, followed by two to four years of higher education. There is also a parallel religious system with similar levels and an Islamic university.

Teacher Training

While the 53 primary teacher training institutions have an output capacity of approximately 10,300 per year, this potential is rarely met. The same holds true for the 10 secondary teacher training colleges which offer training to 3,600 secondary teachers of whom 29% are female. In fact, the annual secondary teacher training output satisfies no more than 50% of the annual attrition from the stock of secondary teachers.⁽³⁾

Number of Schools and Students

According to the Bangladesh Bureau of Statistics (BBS), there are 45,783 primary schools (government and non-government), 9,822 secondary schools, 5,766 *madarshas* (see below), 893 colleges and seven universities.

In 1989, about 200,000 primary and 105,656 secondary teachers were working in government and non-government schools while 12 million primary school-age students and 3.5 million secondary students were enrolled. About 19% of the primary school teachers and 10% of secondary school teachers were female.

Madarshas

Besides the formal and non-formal education system, school-age children have the option of attending *madarshas*, Islamic schools which can be found in most villages and urban settlements. Each school has, on average, 278 students and 16 teachers. This student-teacher ratio of 17:1 compares favourably with that of the Government schools which have only four teachers for 270 students or a ratio of 62:1. However, only 13% of all enrolled children are in the *madarshas*.⁽⁴⁾

Islamic schools play a key role in providing primary education

Support Structure

A Shift in Emphasis

According to World Bank estimates, if the goal of Universal Primary Education is to be met, about 100,000 classrooms need to be built over the next ten years. An additional 4,000 classrooms per year are needed to replace existing ones.⁽⁵⁾ The costs for such an undertaking are staggering and far beyond the scope of the Government and aid community. Past investments in construction of schools have brought about little change in the literacy rates. If the emphasis is shifted to addressing the issue of improving the quality of education, the dividends might be much higher. The first efforts have already been undertaken, as described below.

Encouraging Girl Students

The Government is committed to Education For All and has introduced compulsory primary education and free education for rural girls until class VIII. This is being implemented in phases since January 1992.

Also, the teacher recruitment system has been changed so that 50% of all teacher positions have been targeted for women. These policies are new and their effect has not yet been measured.

Free Textbooks and a New Curriculum

Free text books are now being supplied to students which may contribute to increased enrolment. A revised curriculum is being introduced in 1992 which puts more emphasis on the application of learning, continuing assessment rather than tests and school-based education rather than homework. A "Women In Development" unit has been set up at the National Committee for Text Books to monitor curricula and text books for gender bias.

Mass Literacy

A mass literacy programme was launched by the Government in 1980 but was disbanded in 1982. In 1987 the Government revived adult literacy activities through its Mass Education Project. While Government efforts to increase mass literacy have been limited over the last several years, NGOs have continued implementing such

programmes. One example is VERC, an NGO based in Savar. In its first phase, about 3000 learners were enrolled in 120 literacy centres. Ninety percent of them were made satisfactorily literate and several changes in their lifestyles were observed. For example, most of the learners were motivated to teach their own children. Many could now better understand and keep their family accounts, income was improved considerably and consciousness regarding health, family planning and social values increased.

A broad-based, national Mass Literacy Project is currently being planned for implementation during the Fourth Five Year Plan (1990-95).

Ray of Hope

The general impression about primary education tends to be negative: high drop out and low completion rates, irregular attendance, teacher absenteeism, poor quality and lack of community participation. But there are exceptions that are not very well known. The book "Amader School" tells about eight successful schools in Bangladesh.

One of the schools described is Shibram Government Primary School, located in a very remote rural area in Gaibandha District. In 1991, it recorded 96% enrollment, 78% attendance, 5% drop out and 95% completion. Compared to the average national figures, this speaks of tremendous success. But there is more. The school runs a hostel for 60 students, employs nine additional private teachers and has built a laboratory. Students are informed about ORT, EPI and sanitation (most have a sanitary latrine at home). The school also produces a hand-written wall magazine, practices co-curricular activities and supports poor students with clothes, learning materials and food. It also has 14 income-generating projects. The school-community relationship is very strong and the practice of dowry and early marriage among girls is declining in the community.

Only six years ago the situation at this school was very poor. What has made the difference? The main architect behind the changes was the dynamic headteacher. The first thing he did was to motivate the teachers and develop a team spirit within the school, stressing their accountability to the community. This cohesive group then went to the community and motivated them to become actively involved in school management. With this simple formula, he obtained the full support of the community. Developmental activities are now supported through the income-generating projects and contributions from the community, cash or kind. For example, private teachers, who receive a lower salary than the regular teachers, are compensated by being provided with food.

Support Structure

Non-Formal Education

NGOs are playing a pioneering role in enrolling girls and reducing school dropouts

Since a large number of children are non-enrolled or dropouts, some NGOs pioneered systems of non-formal primary education, designed to reach those children who are outside the government school system. BRAC, for example, has 6,000 schools, covering 180,000 rural children, and plans to expand considerably. The drop out rate is as low as 2% and about 70% of the students are girls. Over 95% of their graduates join formal primary schools in grade IV and V.⁽⁶⁾ Thus, BRAC's non-formal education acts as a feeder and complementary system to the formal stream.

The government has recently formulated a non-formal education programme which will offer greater opportunities for girls from the most disadvantaged strata.

Evaluation

Monitoring and evaluations of the effectiveness of formal and non-formal education programmes remain weak. Also, little is known about students' individual or the systems' achievements. Some studies have shown that non-formal schools have a lower drop out rate than formal schools and that the educational achievements of the students are comparable with those in the formal system. If the education goals of the World Summit are to be reached by the year 2000, a mechanism will have to be set up to collect data and monitor progress.

Water and Sanitation

Great strides have been made in the supply of safe water. So far 1,517,580 tubewells, both Government and private, have been sunk, providing on average every 114 people with one tubewell. There are, however, still large regional disparities: 90 persons per tubewell in the shallow water table areas, 420 persons per tubewell in the coastal belt and 720 persons per tubewell in the low water table areas. Furthermore, during the dry season access to clean water is less, due to the lowering of the water table brought about by intensive irrigation (ground water is pumped which lowers the level below the lift capacity of the suction pump).

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The water supply programme has been successful in achieving most of the targets set out in the previous plan of cooperation with UNICEF. However, the rate of progress in the underserved areas was slow, with only 55% of the target being achieved.

In an attempt to accelerate programme implementation, some key activities, such as the training of caretaker families and the collection of financial contributions from the benefiting communities, were not given due attention. Maintenance is mostly a problem in the low water table areas where *Tara* pumps are being used. Compared to a simple suction pump, these tubewells require moving parts below the ground and subsequently demand more attention.

While 80% of the population have access to clean drinking water, regional disparities still exist

In the past, the Department of Public Health Engineering (DPHE) has given priority to the provision of clean water, a programme which has been highly successful. However, sanitation has lagged behind. In recognition of this weakness, DPHE is appointing a Project Director who will be responsible for the overall sanitation programme, with major emphasis on the social mobilization component.

Unfortunately, the poor cannot afford the water-seal latrine, produced by DPHE centres as well as by the private sector. In comparison, do-it-yourself pit latrines are less expensive and can be built by the majority of families. Both kinds will have to be used to promote sanitation.

In order to speed up the expansion of the sanitation programme, DPHE is gradually forging alliances with major institutions, including the Ansar-VDP (local village defense organizations), the school network and NGOs. It is also seeking to enhance the role of women, both as active collaborators and as a target group, since convenience and privacy for women are perceived as major benefits of latrine installation.

Support Structure

Health, Family Welfare and Nutrition

The Health Care System

Since liberation, family planning has been given the highest priority of all social sectors. Subsequently, there were almost no health facilities, apart from national and district hospitals in the major cities. While health care is increasingly seen as being a complementary component to family planning, both sectors remain administratively separate.

Expansion of the Health Infrastructure

In the last 15 years, an expansion of the health infrastructure took place. In addition to district hospitals, there are now 83 functioning Maternal and Child Welfare Centers at the district and sub-district level, most of which have ten beds, a staff of two FWAs and a support staff.

Almost all of the 460 upazilas have an Upazila Health Complex, each of which serves an average population of over 200,000. About 3,400 out of 4,400 unions have either a Union Health and Family Welfare Center or a Rural Dispensary, each providing outpatient care to about 25,000 people. Each ward has one health assistant and one family welfare assistant, both covering a population of 8,000 people. In addition, there are 100,000 EPI outreach sites. ⁽⁷⁾

The health infrastructure has significantly expanded

Financial Allocation

In fiscal year 1988, the Government spent \$115 million (including capital and recurrent expenditures) on the health system and \$458 million on family planning. That is about \$1 per capita for health and \$0.50 per capita for family planning. It was about 5% of the Government's total budget and it had remained at that level for the last decade or so. ⁽⁷⁾

According to the health expenditure survey analysis, 45% of recurrent expenditures is used to operate the Upazila Health Complexes which may be classified as hospitals. A further 28% is used to operate the balance of hospitals, leaving about 30% for union and village level response. In contrast, over 60% of spending for family planning is for

Situation Analysis - Bangladesh

field organization and supplies and only 20% for construction and maintenance. In short, the health system is more oriented towards hospitals and curative care, while family planning is focused on the rural delivery system. (7)

Low Use of Government Facilities

While the Government's efforts in expanding the network of health care facilities over the past 15 years is impressive, the health care system is highly under-utilized. Despite the fact that health services at public facilities are virtually free, only about one in four patients seek treatment from these facilities. The majority, including a share of the poor, use private practitioners for a fee and often for services of somewhat dubious quality. A major reason for this under utilisation of government facilities is that the quality of the health care offered is very poor, the supply of drugs is limited and the medical staff is repeatedly absent.

A 1987 BIDS household survey gathered data on the utilization of health care services. About 80% of sick people sought treatment of which 18% went to a government clinic, 48% to a qualified private physician and 31% to an allopath who did not hold a medical degree. Only 16% of the rural women received any kind of prenatal care, 2% of whom received it from a government clinic. Private spending on health care averaged about \$4 per capita annually (\$3 in rural and \$7 in urban areas), about four times more than Government expenditures. The poorest families in the sample spent \$7 on health care annually, about 5% of their income, while the richest households spent approximately \$80 per year, about 2% of their income.

Nutrition Policy

Malnutrition is a severe problem in Bangladesh. A consensus on policy and implementation strategy, however, is lacking. Some argue that it is a matter of agricultural production and consumption. Others believe it should be seen as a public health problem, requiring proper health/nutrition education and food supplementation. Furthermore, programmes which target pregnant women and young children, two groups most at risk, are basically non-existent. While a public food distribution system exists, its beneficiaries are mostly the more well-to-do (see

Although malnutrition is the underlying cause in almost a third to half of all under-five deaths, a national consensus on nutrition is still lacking

Support Structure

panel "The Public Food Distribution System in Bangladesh").

The Public Food Distribution System (PFDS) In Bangladesh

The PFDS is an elaborate network through which the government distributes food to a wide variety of population groups. Its basic objective is to ensure adequate availability of foodgrains in the country at all times (food security), without excessive price fluctuations (price stability), to provide food to the needy and disadvantaged groups through such relief programs as Food For Work and Vulnerable Group Development, and to provide remunerative prices to farmers through domestic procurement operations (agricultural development).

The system is operated through 13 distribution channels which fall into two groups: monetized and non-monetized channels. The former which entail the sale of wheat and rice at ration prices, are managed by the Ministry of Food and involve the following groups:

1. **Statutory Rationing (SR):** About 3.4 million people are provided under this system, all of whom are residents of six important cities of the country, i.e, Dhaka, Narayanganj, Chittagong, Khulna, Rajshahi and Rangamati.
2. **Rural or Palli Rationing (PR):** Formerly called Modified Rationing, the system was restructured and renamed in order to strengthen the rationing system in the rural areas and ensure a regular supply of foodgrains to the most needy people. About 8% of low income families (those having no land, paying government tax of no more than 3 taka) in every union and municipality are supplied with food grains at a price 25% less than ration prices.
3. **Essential Priorities (EP):** This includes members of defense and law enforcing agencies, prison and hospital inmates and residents of orphanages. EP is the most favoured category in the rationing system in terms of quota, coverage and prices. Thus, this group receives rice and wheat at prices which are 18-23% of SR/PR/OP prices.
4. **Other Priorities (OP):** All government, semi-government, autonomous corporations, banks, teachers of schools and colleges, students, etc are entitled to receive supplies. More than five million people are covered under this system.
5. **Employees of Large Establishments (ELE):** Employees of large establishments (having more than 50 employees) who live outside statutory rationing areas are entitled to 33 kg of wheat per month regardless of family size.

6. Flour Mills (FM): All flour mills registered with the government receive a monthly allotment of wheat which is converted into flour and sold in the open market.

7. Open Market Sale (OMS): Under this system, food grains are made available on the open market. Any person, business or dealer can buy up to seven tons of food grains at a price fixed by the government. This channel was introduced in 1980 as a means to stabilize retail prices for food grain, especially during lean seasons and times of natural disaster.

8. Marketing Operation (MO): In order out to curb market prices, foodgrains are sold directly to the dealers (ration shops) at subsidized prices.

9. Free Sale (FS): This is carried out to dispose off deteriorating foodgrains, often at prices lower than average market prices.

The non-monetized channels, in which foodgrain is used as food wages for rural infrastructure works, are managed by the Ministry of Relief and consist of the following:

10. Food For Work (FFW): This is an employment generating programme during the winter season which generally entails earth works for canals, dikes, road, etc. Male and female workers receive daily 2.8 kg of wheat, a level considered sufficient to provide the energy requirements of an average family of five.

11. Vulnerable Group Development (VGD): This programme serves destitute mothers with two or more children.

12. Gratuitous Relief (GR): This is a random or contingency element in PFDS which responds to natural disasters such as floods or cyclones.

13. Test Relief (TR): A small minority receive food free of charge, mostly those who live in distressed rural areas and during lean seasons.

The non-monetized channels reached about 14% of the population in FY87, 36% of the urban but only 9% of the rural people. A sample survey of urban and rural households in 1985 indicated that only 39% of households in lower income groups (less than 1,499 Taka/month) had access to PFDS. The access rates in the case of middle and higher income groups were considerably higher - 58% and 47% respectively. To remedy some of these deficiencies, the Government reduced the urban bias of the PFDS by scaling back the relative share of monetized channels (it fell from 73% in 1981 to 52% in 1989) in favour of the non-monetized programmes. Nevertheless, the majority of grain distributed by the PFDS continues to be geared towards those considered less needy.

Support Structure

Communication and Information

There are many channels of information and communication in Bangladesh which may be harnessed for social programmes (see panel "Visualization in Participatory Planning"), some being more effective than others.

Visualization in Participatory Planning (VIPP)

In 1991 a process of alliance building was begun by conducting a series of participatory workshops involving Government, NGOs and donors with UNICEF as facilitator. A special workshop methodology, called Visualization in Participatory Planning (VIPP), was used and became quite popular in that it broke down the formal seminar culture in the planning fora. In itself, the VIPP methodology may be the most important communication innovation which UNICEF has employed in order to achieve the goal for children in the 1990s for it breaks down the walls between Government departments and between Government and NGOs, allowing them to work together more effectively.

The method relies on the preparation of a large number of coloured cards of different shapes and sizes on which participants express their ideas. These cards are then posted on movable boards after the participants have discussed and categorized each card/idea. Less talkative participants find a means of expression and more dominant speakers are forced to let others have their say.

By visualizing ideas on the cards, repetition and circularity are reduced. The groups refine and organize their ideas by moving the cards on the boards. Since the proceedings are there for all to see, discussions tend to be more focused. The method facilitates the process of categorizing, synthesizing and analyzing the ideas of the group and arriving at a consensus.

Over the past year, this method has been successfully used in workshops on breastfeeding, sanitation, education, the girl child, control of diarrhoeal diseases, urban planning as well as in the preparation of the situation analysis.

The challenge in the 1990s is to involve major institutions in the designing of effective strategies and programme delivery. It is hoped that by establishing alliances for different social programmes, these institutions will become mobilized and subsequently will be better able to cooperate. VIPP has already demonstrated its effectiveness and will be a key factor in improving programme delivery in Bangladesh.

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Electronic Media

A recent study by Mitra (1991) on the use of electronic media for social programmes found that while a lot of resources have been poured into the television sector to produce programmes aimed at the masses, less than 5% of the households have their own televisions and only about 20% have access to television through any means. In addition, television programmes often fail to target their messages at decision makers, who do have television sets, in the most effective way. Also, about 23% of the households have a working radio and approximately 15% have access to a neighbour's radio.

Traditional Media

Many development programmes have successfully harnessed traditional media such as folk singers, poets and dramatists. Traditional entertainment seems to be the most popular, whereas fast-moving action spots and drama have more appeal with the urban youth. The majority of people still prefer much slower-paced, thoughtful pieces, often with melodramatic acting. However, there has been very little evaluation of the use and impact of folk media.

NGOs

Non-governmental organizations are a significant force in Bangladesh and, according to the Ministry of Social Welfare, number over 10,000. Many developed in the early 1970s in response to the devastation of war, flood and famine. Their main function was relief and rehabilitation, but as time passed, they have become more involved in poverty alleviation and rural development at the community level. The new trend among NGOs is to focus attention, not on the community as a whole, but on target groups - usually the very poor and women.

NGOs are no longer simply relief agencies but active partners in development

Diverse Operations

Although general trends in the NGO movement can be seen, there is remarkable diversity in NGO operations. There are programmes for awareness building, adult and child literacy, non-formal education, income generation, health, nutrition and family planning.

Support Structure

Small NGOs may focus on one area (subject-wise and geographically) but some larger NGOs have varied programmes that cover a large section of the country. One example is BRAC which uses group formation, or village organizations, as the basis for most of its programmes. It is active in non-formal schooling for adults and children, health, credit and crafts.

Women

The focus of the activities of many NGOs has been improving the condition of poor women. Income generating schemes as well as literacy and conscientization programmes are frequently targeted at women in order to enable them to improve their political, social and economic position. A well-known example is the Grameen Bank which advocates credit as a human right for the poorest. In fact, Grameen Bank members, most of whom are landless and poor, have proven to be the most credit-worthy and the Bank's model has shown that the only type of collateral required is group solidarity.

Working Partners

In many parts of the country, NGOs have become alternative sources of employment and are providing professional services in health, education and agriculture that supplement and complement those of the Government.

In the past, many NGOs tended to work independently of Government, but now cooperation with local government is much more common and most NGOs see themselves as working partners of the Government. A recently established NGO in Dhaka, the Association of Development Agencies in Bangladesh (ADAB), serves to coordinate the process of their effective functioning.

The Scale of NGOs

In 1991, the budget for all NGO projects was approximately \$166 million, which is about \$55 million higher than the money allocated to ten Government ministries involved in rural development. However, it is less than 10% of total aid.⁽⁸⁾

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Funding

NGOs have been responsible for attracting a lot of foreign aid to Bangladesh. Some, however, are becoming more self-reliant. BRAC, for example, is involved in commercial projects such as a printing press, a cold storage plant, a fish freezing plant, three garment factories and a chain of handicraft shops. The profits from these enterprises are used to support their development activities and currently provide a third of BRAC's annual income.

Flexibility

One of the great advantages of NGOs is their flexibility. Most NGOs are decentralized, which allows them to be sensitive to the needs of the people and to develop innovative programmes accordingly. By keeping open the channels of communication, NGOs have been able to fine tune their projects in cooperation with the people they aim to help. This gives workers and beneficiaries a sense of ownership and promotes the sustainability of projects.

A major advantage of NGOs is their ability to quickly respond to community needs

References

- (1) Mondal, A.H. (1991), *Decentralization in Bangladesh: A Review of Human Development Initiative*, background paper prepared for the 1992 UNDP Human Development Country Initiative, Bangladesh Institute of Development Studies (unpublished)
- (2) World Bank (1988), *A Review of Selected Issues in Education*, Report No. 6770-BD
- (3) UNDP (1992), *Human Development in Bangladesh: Local Action Under National Constraints*, report prepared under the 1992 UNDP Human Development Country Initiative (unpublished)
- (4) Bangladesh Bureau of Statistics (1991), *1991 Statistical Yearbook of Bangladesh*
- (5) World Bank (1989), *Staff Appraisal Report. Bangladesh - General Education Project*, Report No. 8015-BD
- (6) Bangladesh Rural Advancement Committee (1991), *Together for Education*

Support Structure

(7) Griffin, C.C. (1989), *Mobilizing Resources for Health and Family Planning. 1987 Bangladesh Health Expenditure Survey, Summary Report*, University of Oregon, Department of Economics

(8) Jahan, S. (1991), *Financing Human Development in Bangladesh*, background paper prepared for the 1992 UNDP Human Development Country Initiative, Bangladesh Institute of Development Studies (unpublished)

Perspectives

Situation Analysis - Bangladesh

Perspectives

Bangladesh undoubtedly faces some serious problems in the years ahead - tremendous poverty, intense population pressure and high mortality and morbidity rates. But the Government has already been very responsive to social priorities and was one of the first signatories of the Convention on the Rights of the Child and the Declaration of the World Summit for Children. Recent political moves towards a more democratic system of government provide cause for optimism.

Primary Education

Progress has already been made towards achieving Primary Education For All. The Government has mandated primary education to be compulsory, with free education for girls in rural areas up to class VIII. Also, disparities between boys' and girls' enrollment has declined, but fewer girls complete their primary schooling. The challenge now is to improve the quality of education and ensure that all children, especially girls, receive basic schooling.

Sanitation

The majority of the population now have access to clean water but unless sanitation becomes a priority and more people use a sanitary latrine, the achievements made in the provision of clean water will have a marginal effect on improving health conditions.

EPI Plus

The success of EPI has shown that rapid change is possible in Bangladesh. The time has now come to use the lessons learned by the EPI programme and extend the provision of basic preventive health care by using the infrastructure created. Eliminating deficiencies in iodine, vitamin A and iron alone will have a significant impact on the general health status of the population. The service delivery system and the continuation of social mobilization can make this possible.

Perspectives

The Position of Women

Women are at a serious disadvantage despite the fact that, as in most countries of the world, they are the key force in the social and economic development process. Their needs therefore require particular focus if any substantial socio-economic development is to occur.

Managing Resources

Bangladesh remains a very poor country with a limited budget. It will have to manage its resources carefully and set new priorities for budget allocations in order to achieve improvements in human development.

Annexures

Dhaka Declaration

Declaration on the Protection and Promotion of Breastfeeding...

Recognizing that;

- the practice of correct breastfeeding is declining in Bangladesh;
- commercial and social pressures on mothers through the advertising and promotion of breastmilk substitute erode correct infant feeding practice;
- economic pressure on opportunities for mothers in both urban and rural areas to work outside the home are on the increase.

And cognizant that in Bangladesh,

- extremely high rates of malnutrition are prevalent among infants, young children and mothers;
- unacceptably high levels of infant mortality exists;
- women have less access to resources and to information, education and effective participation in decision making;
- ignorance and illiteracy contribute significantly to ill health and malnutrition;

And in full awareness that,

- colostrum is the newborn's first and most important immunization: breastmilk protects infants from various infections and a breastfed baby has 14 times greater chances of survival beyond childhood than a non-breastfed infant;
- exclusive breastfeeding provides optimum nutrition for the infant for the first five months of life;
- exclusive breastfeeding is the most significant contraceptive, preventing up to six additional pregnancies during a mother's reproductive life; breastfeeding also offers considerable other benefits to the mother;
- breastfeeding creates a unique bonding between child and mother;
- breastfeeding saves money for the family, society and the nation.

We, the undersigned, meeting in Dhaka, pledge that:

- Government policies and programs will be formulated to empower women and ensure their access to achieve optimal health for themselves and for their families, to family planning services, and to information allowing them to sustain breastfeeding;
- Medical practitioners, nurses, TBAs and other maternity personnel will be enabled, through appropriate basic and refresher training to ensure that every pregnant woman is made fully aware of the importance and advantages of breastfeeding, is supported to initiate breastfeeding immediately on delivery, and to maintain exclusive breastfeeding for the first five months;
- Government and private hospitals and clinics will comply with all ten steps to successful breastfeeding by the end of 1991. They will adopt policies which will protect the practice of exclusive breastfeeding;
- Legislation controlling the marketing of breastmilk substitutes, passed by the Government of Bangladesh in 1984 and amended in 1990 by the Parliament, will be vigorously enforced: further legislation will be passed, ensuring that the national code is at least as rigorous as the WHO/UNICEF International Code of Marketing of Breastmilk Substitutes;
- Government will review the existing legislation on protecting the breastfeeding rights of working mothers, enforce such legislation, and enact additional legislation if existing laws are inadequate;
- Religious teaching which supports breastfeeding, particularly that from the Koran, shall be made widely known;
- The activities required to promote proper breastfeeding and correct weaning practices will be incorporated into all Primary Health Care and Child Survival programmes and will be supported through extensive educational and promotional activities;
- In order to achieve these above mentioned objectives, the mother and child should be considered as the focal point of all Government activities;
- A national Society for the Protection and Promotion of Breastfeeding will be established to support this Declaration.

Table 1
Rate of GDP Growth During the 1980s

Indicators	(at 1972/73 market prices)									
	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	
1. GDP (Million Tk.)	71644	72226	74835	78003	80903	84932	88151	90018	92129	
2. Real Annual Growth (%)	6.8	0.8	3.6	4.2	3.7	5.0	3.8	2.1	2.3	
3. Population (Million)	90.89	93.20	95.56	97.99	100.47	102.86	105.28	107.76	110.29	
4. Per Capita Real GDP (Tk)	788	775	783	796	805	826	837	835	883	
5. Per Capita Real GDP Growth (%)	-	-1.6	1.0	1.6	1.1	2.6	1.3	-0.2	0.0	

Table 2

Human Development Focus in the Consolidated Public Expenditure for Selected Years (in US\$ million)

	FY 84	FY87	FY90
Education	141 (9.5)	264 (11.2)	371 (10.7)
Health and Family Planning	80 (5.4)	92 (3.9)	180 (5.1)
Physical Planning Housing, Water and Sanitation	31 (2.1)	45 (1.9)	65 (5.1)
Total	1,481	2,359	1,473

Figures in parenthesis indicate percentage of the total.

Table 3

Current Expenditure (FY86) Incidence on Human Development
(in Taka per Household)

	Ultra Poor (Below Tk. 1500 per Month)	Poor (Below Tk. 2000 per Month)	Not Poor (Above Tk. 2000 per Month)
Human Resource Development	163.1	190.4	782.6
Education	47.4	75.0	671.6
Health and Population	115.6	115.4	111.1

Source : World Bank (1991)

Official exchange rate = US\$ 1 = Taka 35.50

Table 4

Bangladesh: Annual Development Programme by Sector, 1985/86 - 1991/91

	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91 (est.)
Agriculture and Water Resources	20.9	17.1	19.3	25.1	25.8	24.1
Agriculture	6.0	4.3	6.2	7.9	7.5	8.4
Rural development	2.9	2.4	2.3	2.8	5.0	4.2
Water and Flood Control	12.1	10.4	10.8	14.4	13.3	11.5
Industry	15.6	15.7	10.4	6.2	5.2	3.5
Energy	27.7	26.0	23.6	17.7	16.2	14.7
Transport	7.5	9.9	11.2	13.3	10.6	8.4
Communications	1.3	0.8	2.3	3.0	3.2	1.7
Housing and Planning	3.3	3.1	4.0	3.9	3.8	3.6
Education	3.7	4.4	5.1	5.6	6.0	7.8
Health	1.9	1.7	2.0	2.2	2.5	3.6
Family Planning	2.6	2.4	3.4	4.7	5.8	5.5
Social Welfare	0.4	0.5	0.4	0.9	0.5	0.8
Employment	0.2	0.2	0.1	0.1	0.2	0.2
Local Government	3.7	7.3	9.2	4.4	4.7	2.9
Other	11.2	11.0	9.0	13.0	15.6	23.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source : IMF (1991)

Table 5
Balance of Payments

	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91 (Est.)
Import - GDP Ratio	.198	.177	.194	.185	.166	.183	.168	.160	.166	.171	.175	.161
Export - GDP Ratio	.066	.050	.047	.056	.057	.065	.058	.066	.060	.065	.069	.077
TB - GDP Ratio	.141	.128	.147	.128	.109	.118	.110	.094	.098	.106	.106	.084
CAD - GDP Ratio	.119	.100	.120	.084	.067	.091	.077	.059	.062	.074	.073	.057
Debt Service - Export Ratio	.126	.128	.156	.194	.160	.194	.274	.239	.249	.278	.263	.249

Note : TB = Trade Balance; CAD = Current Account Deficit.

Table 6

Intra - Household Disparity in Human Development

	Male	Female
a. Daily per Capita Calorie Intake (Kcal 1981)	1927	1599
b. Daily per Capita Protein Intake (gm)(1981)	41.4	32.7
c. Literacy Rate (percentage)(1990)	45	20
d. Enrollment Rate (1987)		
Primary	70	50
Secondary	32	15
e. Life Expectancy at Birth (years)(1990)	52 -54	49 - 51
f. Infant Mortality Rate per 1,000 Live Births (1989)	95	102
g. Malnutrition Among Young Boys and Girls (Percentage, 1985)	5	14
h. Underemployment Rate (Percentage, 1985)	22	44

Source : World Bank (1991), UNDP (1991), Chen et al. (1981) and Jahan (1991).

Table 7
Estimates of Wage Rates of Agricultural Workers During
Normal and Slack Seasons, 1991

Regions	Normal Wage Rate (Tk/day)		Price of coarse rice (Tk/kg)	Rice equivalent of wages (kg/day)	
	Normal season	Slack season		Normal season	Slack season
Chittagong	44	35	12.34	3.57	2.84
Dhaka	34	23	12.31	2.76	1.87
Rajshahi	33	21	11.30	2.92	1.86
Khulna	36	25	12.42	2.90	2.02
Bangladesh	37	26	12.10	2.98	2.15

Source : BIDS Field Survey of 251 Upazilas in October, 1991

Table 8
Gender Differential of Wages in Garments Industry, 1990

Categories of Worker	Wages paid (Tk/month)		Female wage rate as percent of male
	Female workers	Male workers	
Supervisor	2,426	2,317	104.7
Operator	1,069	1,238	86.3
Cutting & finishing helper	603	846	71.3
Sewing helper	439	598	73.4
Ironer	868	985	88.2
All Categories	886	1345	85.9

Table 9
Wage Differential in Garments Industry by
Level of Education of the Workers

Level of education of the worker (years of schooling)	Female Workers		Male Workers		Female wage rate as percent of male
	Percent of total workers	Wages (Tk/month)	Percent of total workers	Wages (Tk/month)	
Nil	29.2	620	9.8	811	76.4
1 - 5	34.6	746	14.3	863	86.4
6 - 10	27.5	1,047	39.6	1,335	78.4
Above 10	8.6	1,888	36.3	1,688	111.6

Official exchange rate US\$ 1 = Taka 35.5

Table 10
Trend in Selected Indicators Related to Education

	1951	1961	72/73	73/74	74/75	75/76	76/77	77/78	78/79	79/80	80/81	81/82	82/83	83/84	84/85	85/86	86/87	87/88	88/89	89/90*	
	(1974)										(1981)										
Literacy Rate (National)																					
Male	25.50	30.80	n.a.	32.90	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	35.40	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	45
Female	10.10	10.10	n.a.	14.80	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	16.40	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	29
Current Enrollment Rate (national)																					
Primary (5-9)	37	35	n.a.	60	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	58	n.a.	58.89	72.87	n.a.	80.90	84	80	n.a.	n.a.	60
Secondary (10-14)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	20.92	22.17	n.a.	22.90	24.20	24.00	n.a.	n.a.	n.a.
Higher (15-24)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1.90	2.03	n.a.	3.10	3.30	3.51	n.a.	n.a.	n.a.
Teacher-Student Ratio																					
Primary	n.a.	n.a.	1:48	1:51	1:51	1:49	1:48	1:46	1:44	1:45	1:47	1:48	1:50	1:52	n.a.	1:58	1:60	1:62	n.a.	n.a.	n.a.
Secondary	n.a.	n.a.	1:24	1:24	1:25	1:24	1:22	1:24	1:27	1:27	1:27	1:28	1:28	1:27	n.a.	1:28	1:29	1:29	n.a.	n.a.	n.a.
College	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1:31	1:30	n.a.	1:35	1:37	1:36	n.a.	n.a.	n.a.
University	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1:15	1:14	1:16	1:16	n.a.	1:11	1:11	1:16	n.a.	n.a.	n.a.
Percentage of Passes																					
S.S.C.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	59.3	61.1	56.0	57.1	55.2	45.4	57.2	46.1	65.9	59.8	55.8	42.9	n.a.	n.a.
H.S.C.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	52.7	62.3	59.5	54.9	27.8	38.0	54.7	51.4	56.4	47.4	44.7	25.0	n.a.	n.a.
Education Sector in Annual Development Plan (%)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	4.2	3.3	4.2	4.6	4.4	4.4	4.0	5.5	5.6	6.0	6.0
Development Expenditure as % of Total Public Expenditure on Education	n.a.	n.a.	n.a.	n.a.	24.6	28.3	20.7	30.0	26.6	25.4	29.6	30.2	27.7	24.1	18.2	n.a.	13.5	15.5	22.7	-	-
Per Capita Public Expenditure on Education	n.a.	n.a.	n.a.	n.a.	16.28	15.78	18.23	22.95	28.13	29.17	36.32	38.67	41.67	50.11	58.62	n.a.	82.48	97.85	115.16	124.65	124.65
(Taka in current prices)																					

Note 1. * 1989/90 Literacy rate and enrollment figures are based on BIDS survey data. The Primary enrollment figure for 1989/90 relates to the age group 6 - 14 years
 2. The source of BBS data on current enrollment rates for successive years is not clear and needs to be taken with utmost caution. Trend in drop out rates is available from BBS data.
 Source : Calculated from Statistical Year Book of Bangladesh (Various Years).

Table 11
Public Expenditure on Education

Year	Education as % of constant price GDP	% of total government expenditure allocated to education	% of current expenditure allocated to education	% of capital expenditure allocated to education
1973 - 74		12.5	20.7	3.5
1974 - 75		9.9	15.7	3.3
1975 - 76		8.4	14.4	3.5
1976 - 77		7.9	13.3	3.6
1977 - 78		8.2	13.8	3.6
1978 - 79		7.9	13.1	3.7
1979 - 80	2.1	6.6	10.7	2.1
1980 - 81	2.01	7.1	11.4	2.4
1981 - 82	2.06	7.4	11.9	2.5
1982 - 83	2.05	7.8	12.7	2.9
1983 - 84	2.03	6.1	7.6	4.1
1984 - 85	2.1	9.3	13.2	3.4
1985 - 86	2.2	10.3	15.5	2.4
1986 - 87	2.2	12.1	18.5	4
1987 - 88	2.3	12.7	17.9	5.3
1988 - 89	2.4	10.9	14.4	4.8
1989 - 90	2.3	11.5	15.7	4.4

Source : BBS Statistical Year Book

Table 12
Public Expenditure on Education by Purpose (1978 - 79)

Purpose	% of total expenditure on education
Administration	6.27
Teacher Salary	44.55
Books/ Teaching Materials	0.26
Scholarships	.01
Welfare Service	10.87
Capital Expenditure	36.23
Miscellaneous	1.82
	100.00

Source : Educational Statistics of Bangladesh, 1981, BANBEIS.

Table 13
School Attendance Rate of Primary Education Age-Group

A: By Region (in %)		
Region	1974	1981
Urban	31.5	31.6
Rural	17.7	21.1
Bangladesh	18.7	22.5

B: By Sex (in %)		
Sex	1974	1981
Male	22	24.7
Female	17.4	20.2
Total	18.7	22.5

Source: **BBS Statistical Year Book.**

Table 14
Primary Education Facilities

Year	No. of schools per 10,000 population	Primary students per Teacher
1972	4.1	47.0
1981	4.7	47.3
1982	4.6	49.2
1983	4.5	50.1
1984	4.5	52.5
1985	4.4	54.6
1986	4.3	59.8
1987	4.2	62.1
1988	4.1	62.1
1989	4.1	61.1
1990	4.1	61.1

Source : **BBS Statistical Year Books.**

Table 15
**Extent of Participation of Children in Schools by the Level of
Education of the Household Head and the Landownership
Status of the Household, 1988**

Completed year of schooling of the head of the household	Land owned by the household (acres)				Total
	Less than 0.5 acres (landless)	0.5 to less than 2.5 acres (small farm)	2.5 to less than 5.0 acres (medium farm)	5.0 acres and more (large farm)	
Primary school age group (6 - 10):					
Nil	35.7	47.0	66.6	80.4	45.8
1 - 5	56.6	65.9	66.0	77.2	63.7
6 - 10	65.4	82.6	76.9	90.0	77.3
11 +	86.6	78.1	77.5	86.3	81.5
Total	47.3	62.3	70.5	82.6	59.8
Secondary school age group (11 - 16):					
Nil	20.6	40.2	60.4	57.8	35.3
1 - 5	42.2	62.5	76.9	56.5	57.3
6 - 10	62.1	77.5	66.6	61.5	69.0
11 +	82.3	67.4	79.4	66.0	71.7
Total	34.2	57.3	70.5	60.8	52.5

(Figures in percent of total school age population)

Table 16
Selected Health Sector Related Input-based Indicators

Indicators	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990/91 (est.)
Population per Registered Doctor ('000)	15.26	15.53	14.25	12.90	12.28	11.24	9.78	9.03	9.02	8.31	7.26	6.89	6.39	6.22	5.98	n.a.	n.a.
Population per Registered Nurse ('000)	72.47	65.29	56.88	48.26	42.92	36.11	29.77	24.33	20.71	18.51	16.89	15.65	14.88	15.04	14.58	n.a.	n.a.
Population per Registered Lady Health Visitor ('000)	239.97	215.39	197.49	203.22	209.11	205.71	204.28	202.44	197.04	126.07	83.32	63.55	64.94	58.65	n.a.	n.a.	n.a.
Population per Registered Midwife ('000)	89.99	107.26	96.64	90.25	82.96	76.15	66.43	40.60	31.77	27.91	25.45	22.84	19.78	18.04	16.44	n.a.	n.a.
Population per Registered Family Planning Personnel ('000)	n.a.	n.a.	n.a.	n.a.	n.a.	5.30	5.57	5.67	6.13	6.63	6.35	n.a.	6.29	5.50	4.99	n.a.	n.a.
Population per Bed in Govt. Hospital and Dispensaries ('000)	6.09	513	5.28	5.43	5.12	5.08	4.74	4.78	4.87	4.71	4.48	4.39	4.41	3.96	4.01	n.a.	n.a.
Population per Bed in Govt. Hospitals and Private Clinics ('000)	6.09	513	5.28	5.43	4.42	4.40	4.09	3.82	3.90	3.81	3.68	3.63	3.66	3.19	3.23	n.a.	n.a.
Population per Hand Tubewell for Drinking Water in Rural Areas ('000)	n.a.	0.34	0.31	0.30	0.26	0.24	0.21	0.20	0.18	0.17	0.17	0.16	0.16	0.15	0.15	n.a.	n.a.
Per Capita Public Expenditure on Health (taka in current prices)*	n.a.	n.a.	n.a.	n.a.	n.a.	15.28	16.84	18.28	20.31	26.29	31.38	27.81	34.02	38.34	59.62	73.51	n.a.
Health Sector in Annual Development Plan (%)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2.7	2.7	2.6	2.3	n.a.	1.9	1.7	2.0	2.2	2.5	3.6

* Data relating family planning personnel, per capita public expenditure, and health sector's (excluding population control) share in ADP fiscal years (i.e. figure for 1979 will stand for 1979/80, etc)

Source : Calculated from Statistical Year Book of Bangladesh (Various Years).

Official exchange rate US\$ 1 = Taka 35.5

Table 17
Trend in Selected Outcome-based Health Indicators

Indicators	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989-90
1. Crude Death Rate (per 1,000)										
National	10.18	11.50	12.20	12.30	12.30	12.00	11.90	11.50	11.30	13.90
Urban	6.81	7.21	6.90	7.50	8.50	8.30	8.40	7.60	7.40	n.a.
Rural	10.77	12.77	12.80	13.20	12.90	12.90	12.30	11.80	11.80	n.a.
2. Infant Mortality Rate (per 1,000)										
National	101.4	111.5	121.9	117.5	121.8	112.0	116.0	113.0	116.0	110.0
Male	102.3	113.4	124.1	118.8	133.5	114.0	122.0	120.0	116.0	n.a.
Female	97.4	109.5	119.4	116.0	109.3	109.0	111.0	105.0	115.0	n.a.
Urban	80.7	99.4	103.0	98.8	119.5	99.0	101.0	95.0	91.0	n.a.
Rural	103.5	112.5	123.2	120.8	122.0	113.0	118.0	115.0	112.0	n.a.
3. Child Death Rate (per 1,000)										
National	12.7	16.5	22.2	23.8	17.1	15.2	13.1	12.5	13.5	11.0
Male	12.7	15.7	20.5	25.5	14.4	14.0	13.1	11.0	12.3	n.a.
Female	12.7	18.0	23.9	22.0	19.8	16.4	14.5	13.9	14.7	n.a.
Urban	8.0	9.4	9.1	10.5	10.5	10.4	9.7	8.6	8.7	n.a.
Rural	13.2	17.5	23.6	26.2	17.8	15.8	14.1	13.1	14.1	n.a.
4. Life Expectancy at Birth										
National	56.9	54.8	54.5	54.9	54.8	55.1	55.2	56.4	55.4	53.0
Male	57.0	55.3	54.5	54.2	54.9	55.7	55.2	56.9	55.9	n.a.
Female	57.1	45.4	54.8	53.6	54.7	54.6	55.3	56.0	54.4	n.a.
Urban	61.9	60.1	60.6	60.3	58.7	60.1	58.8	60.0	60.4	n.a.
Rural	56.6	54.3	53.9	53.1	54.4	54.7	54.8	56.1	55.3	n.a.

* 'Child death rate' relates to children of age group 1-4 years.

Note: 1989-90 figure is taken from the Fourth Five Year Plan document, while others represent BBS estimates.

The source of BBS data is not clear and needs to be taken with utmost caution.

Source: Statistical Year Book of Bangladesh (Various Years).

Table 18
Sanitary Conditions by Social Class

Landownership category	% of households in each land category having access to :	
	Safe drinking water facilities	Sanitary toilet
Landless	85	4
Functionally Landless	86	1
Marginal Owner	87	7
Small Owner	91	15
Medium Owner	90	21
Large Owner	94	36
All Households	87	9

Source : *Analysis of Poverty Trends: 62-Village Survey, 1989-90, BIDS.*

Table 19
Pattern of Latrine Use

		Latrine Type		
		Open Pit	Closed Pit	No Fixed Place
Adults	Urban	91	9	-
	Rural	89	7	4
Children	Urban	40	3	54
	Rural	26	2	73

Source: Fitzroy J. Henry, *Socio-Environmental Determinants of Malnutrition and Morbidity*. FAO/ICDDR,B (1988.)

Table 20
Public Food Distribution System
Share of Different Channels of PFDS
(Rice & Wheat)

Channel	('000 metric tons)					
	1987 - 88		1988 - 89		1989 - 90	
	off - take	%	off - take	%	off - take	%
1. Statutory Rationing	189	8	203	7	156	7
2. Modified Rationing*	316	13	333	11	543	25
3. Essential Priority	125	5	137	5	141	7
4. Other Priority	456	18	423	14	279	13
5. Large Employee	35	1	40	1	35	2
6. Open Market Sale	257	10	255	9	47	2
7. Flour mill	110	4	125	4	168	8
8. Food for Work	555	22	611	21	457	21
9. Vulnerable group feeding	410	16	506	17	187	9
10. Gratuity Relief & T.R.	51	2	309	11	148	6
Total	2495	100	2942	100	2161	100

* Palli Rationing