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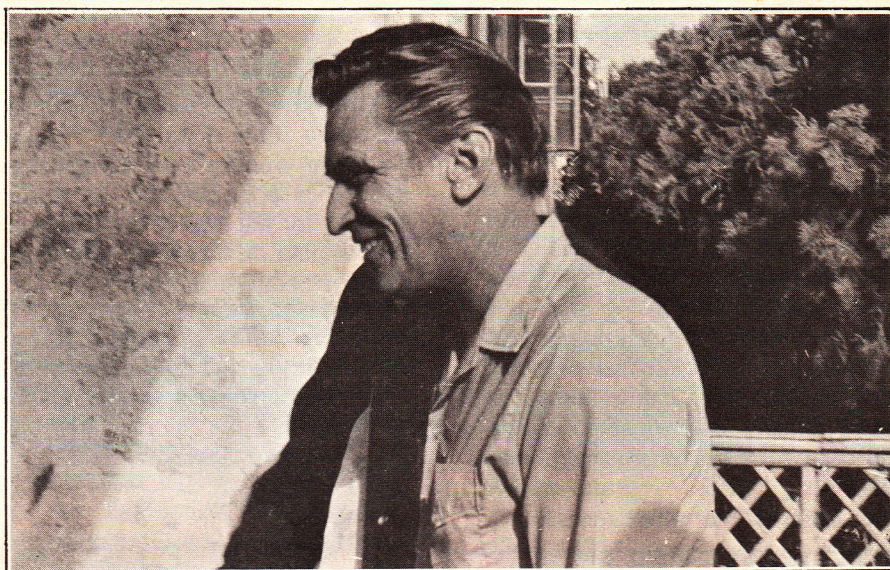
CUBAN HEALTH MINISTER VISITS ICDDR,B

Cuban Public Health Minister and Special Envoy of President Fidel Castro, Mr. Jose A. Gutierrez Muniz accompanied by Bangladesh State Minister for Health Dr. Fazlul Karim visited the ICDDR,B on May 18, 1979. Dr. W. H. Mosley, Director, received the Cuban Minister. Mr. Muniz was later taken around the hospital wards, the treatment centre and other departments of the Laboratory. He expressed his satisfaction over the efficient functioning of the research centre.

TEKNAF DYSENTERY PROJECT

Teknaf Dysentery Project was established in late 1974 to study the epidemiology of shigellosis and to discover an optimal method of therapy and intervention for shigellosis. At the beginning the project was financed by UNICEF and at present it is run by ICDDR,B with a grant from International Development Research Centre (IDRC), Canada.

Teknaf is situated on the south-eastern tip of Bangladesh bordered by the Naf river and the Bay of Bengal (see map). Almost two-thirds of Teknaf thana is comprised of hilly areas, which constitute a part of reserve forest. These areas are largely inaccessible. A 55 mile motorable road connects the Thana Headquarter with Cox's Bazar which is the sub-divisional headquarters. The communication within the thana is mainly on foot. St. Martin Island, a beautiful and



Cuban Health Minister Mr. J. A. Gutierrez Muniz visits ICDDR,B

the only coral island of Bangladesh, is located within the Teknaf thana. It is situated about 20 miles into the Bay of Bengal.

There are three seasons: hot dry, monsoon and winter. There arises a great scarcity of water during the hot dry season. Heavy rain falls occur during the monsoon followed by cool, dry, and pleasant weather during the winter.

Teknaf thana has a population of about 85,000 most of whom are conservative Muslims. A sizeable number of tribal people live in Teknaf thana; they are mostly Buddhists. Ten percent of the population is literate and the principal livelihoods are agriculture and fishing. Rice is grown only in the monsoon but betel leaves and betel nuts, important economic

crops, are also grown abundantly round the year. Fishing is carried out in the Bay of Bengal and the Naf river. The sources of water (for drinking and other purposes) are mainly from ditches and dugwells because sinking of a hand-pump is difficult due to the presence of rocky subsoil. Few people use fixed latrines.

One main objective of the project is to test effects of different water and sanitary intervention measures on reduction and control of diarrhoeal illnesses. To carry out the programme the following major activities have been or will be put into operation.

Diarrhoea and demographic surveillance system

A census of the whole popula-
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TEKNAF DYSENTERY PROJECT

(From page 1)

tion of the Thana was conducted during December 1974 and January 1975. A diarrhoea and demographic surveillance system was initiated upon the completion of the census. At present a population of 45,000 is under routine surveillance. Field Assistants accompanied by local female workers visit households every 7 to 10 days.

Treatment centre and diagnostic laboratory

There are two diarrhoea treatment centres, the main centre is in Teknaf thana headquarter and the subsidiary centre is in Shahpurid-wip. All diarrhoeal patients who report to these centres are attended to and treatment is provided free of cost.

Stools and rectal swabs are examined to detect the organisms causing diarrhoeal illness. In the absence of any electric facility in Teknaf, incubator and refrigerators are operated by using kerosene and a pressure cooker is used for sterilization. Media are prepared at the laboratory using demineralised water. Laboratory investigations such as blood counts, water analysis, and antibiogram assays etc, are also performed.

Water, sanitation and health education

Some tubewells and water sealed latrines have been and will be installed in specific study communities. Simple sanitary health education has been provided routinely through house-to-house visits.

Nutrition and food intake study

A group of children below 3 years of age are being followed longitudinally with anthropometric measurements. Dietary intake studies during sickness and after recovery of children are also done to elucidate the mechanism of the development of malnutrition.

Community based oral rehydration

Oral rehydration salt packets for diarrhoea were distributed through volunteer workers from 40 specified depots in a population of about 10,000 for the use of the villagers. The impact of mortality from diarrhoea is being evaluated.

SEMINAR ON DEMOGRAPHIC SITUATION IN TEKNAF DEMOGRAPHIC SURVEILLANCE SYSTEM

Mr. Mizanur Rahman, of the Statistics Branch, ICDDR, B gave a seminar on "Population Composition and Recent Demographic Data in the Teknaf Surveillance Area" at ICDDR, B on March 8, 1979. The seminar was attended by scientists and scholars of both ICDDR, B and the Bangladesh Institute of Development Studies (BIDS)

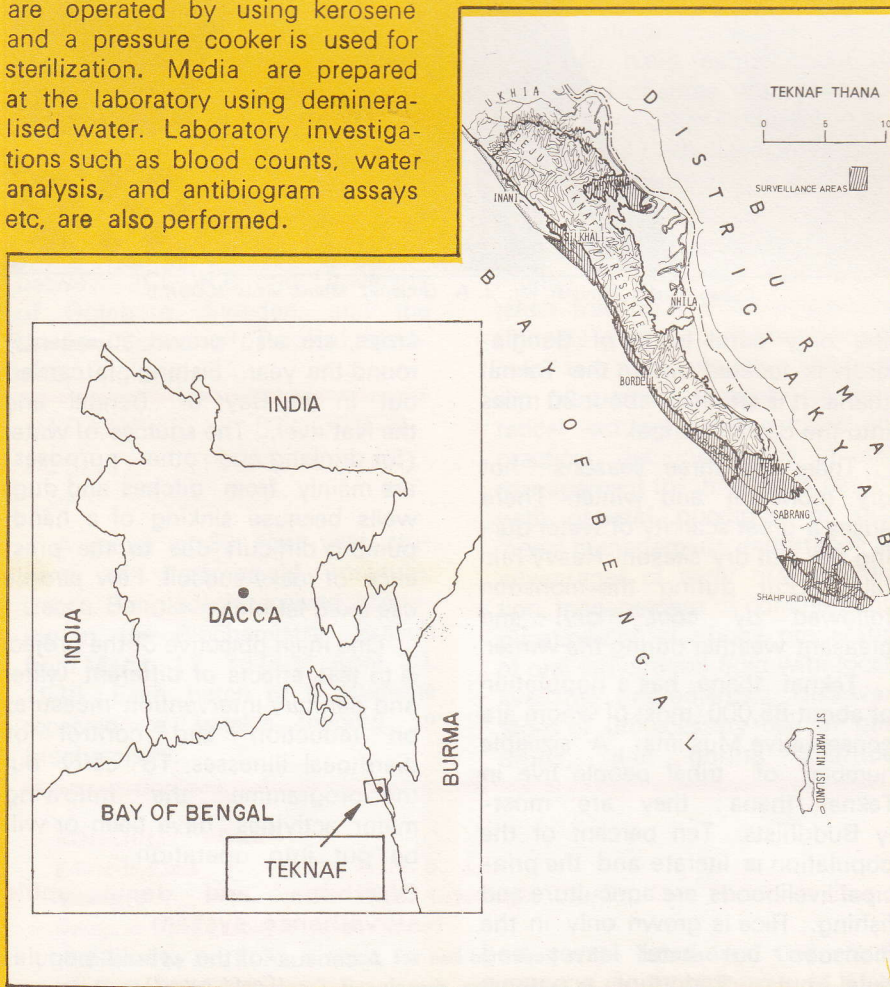
The population in 1976 and 1977 has been experiencing a) High Fertility - Crude Birth Rate = 49 per 1000 population, Total Fertility Rate = 7.4 births per woman and Net Reproduction Rate = 2.8 daughters per woman b) moderate mortality - Crude Death Rate = 16.5 per 1000 population c) high infant mortality - Infant Mortality Rate = 157 per 1000 live births and d) moderate migration - Out-Migration Rate = 33 and In-Migration Rate = 29 per 1000 population.

Tetanus, prematurity & congenial illness caused the majority of the neonatal deaths. Diarrhoeal illness, fever and pneumonia are the major killers of infants in the post-neonatal period and children below 5 years. One third of the out-migrants leave for service in Middle East and 42 percent of the in-migrants come from Burma.

ICDDR, B STALL AT 'RUPASHI CHANDPUR' AWARDED SECOND PRIZE

In a simple but impressive ceremony on the closing day of the Agricultural, Industrial, Health, Family Planning and Cultural Exhibition held at Chandpur town of Comilla district nicknamed as "Rupashi Chandpur-79", the ICDDR, B stall was awarded second prize and commendation certificate for overall performances in the exhibition.

The ICDDR, B stall was organized and managed by the Community Training Project of ICDDR, B located at Chandpur town.



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RECENT ICDDR,B PUBLICA- TIONS

- 1 Cholera Due to the El Tor Bio- type Equals the Classical Bio- type in Severity and Attack Rates by *Moslemuddin Khan* and *Md. Shahidullah*. March, 1979. (*Scientific Report No. 20*).

This study of cholera, biotype El Tor, demonstrated, in the same communities where classical cholera had existed, a higher secondary infection rate, higher infection to case ratio and higher percentage of families with multiple cases than both the former classical and El Tor cholera. It also showed a higher secondary infection rate when the first cases of families were either adult women or children up to the age of 14 than in families with adult male first cases. The family contacts had several hundred times greater risks of being hospitalised with cholera than the population in general at the same time. Further studies are needed in other endemic zones.

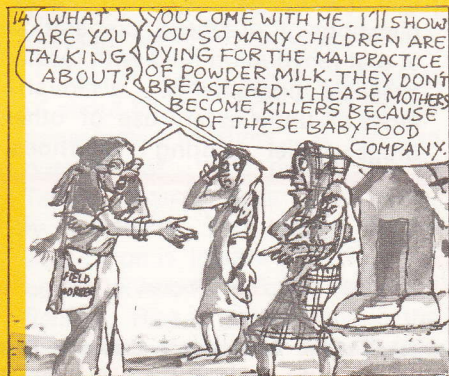
2. An Estimation of Response Bias of Literacy in a Census of Rural Bangladesh by *M. Shafiqul Islam, George T. Curlin* and *K.M.A. Aziz*. March, 1979. (*Scientific Report No. 21*)

In this investigation an assessment was made of the accuracy of literacy information in the 1974 census of the Cholera Research Laboratory at Matlab, Comilla. In a systematically selected sample of

11,304 population a follow-up study was conducted to measure the validity of verbal responses of literacy by means of a literacy test. The reported literacy rate of Matlab was 30.3 compared to 24.3 for Bangladesh for the same year. The overall misreporting rate of literacy of Matlab was found to be 7.5%. In primary and secondary and above educational levels reported literacy rates were 61.9 and 96.8 respectively. The rate of misreporting was 10.6 among those with primary education compared to 1.5 at the secondary and above level. In Matlab at least two completed years of schooling was necessary for a person to maintain the ability to read and write a simple vernacular statement. The reported male literacy rate was 41.5 and that for females was 18.5. The Hindu reported literacy rate was 35.2 compared to 29.6 for the Muslims. The Hindus reported a higher literacy rate than that of the Muslims in most age groups.

3. *Vibrio Cholerae* by *William B. Greenough, III*. April, 1979. (*Scientific Report No. 22*).

In this paper a review of the history and current knowledge of *Vibrio cholerae* and related diseases is presented. Consideration of the host defenses is made and the microbiology is discussed. Diagnostic methods and current approach to treatment are outlined. Preventive measures and approaches to epidemic cholera are also delineated.



To be continued

ICDDR,B ESTABLISHES NEW SCIENTIFIC CONTACTS WITH EUROPEAN INSTITUTIONS

Dr. A. M. Molla, Senior Investigator, visited Belgium, Holland, Germany and Great Britain recently with a view to establishing scientific collaboration with several European institutions. Dr. Molla also presented a paper on *Paediatric Diarrhoea and Nutrition* at the annual meeting of the Belgian Paediatric Society of which he is a member. During this trip Dr. Molla had meetings with paediatricians, gastroenterologists and experts on tropical medicine of Belgium, Holland and U.K with bright prospects for starting technical collaboration with several European institutions. Among these institutions are: Catholic University of Leuven, Belgium; State University of Amsterdam; Royal Tropical Institute of Amsterdam; Department of Medicine, Queen University of Belfast.

Dr. W. B. Greenough also visited the Royal Tropical Institute of Amsterdam recently to follow-up the trip of Dr. Molla. It seems very likely that ICDDR,B will be able to establish cooperative relationships with Holland and Belgium. This scientific collaboration may be similar to that already established between ICDDR,B and University of Goteborg, Sweden, and the London School of Tropical Medicine, England.

PARAMEDICAL STUDENTS RECEIVE TRAINING AT ICDDR,B

A group of 32 First year students of Paramedical Institute, Dacca, Bangladesh received a training in the Biochemistry Branch from March 12, 1979 to April 20, 1979. Each batch of 8 students received a week's training in biochemistry.

EDITORIAL BOARD

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Members : Dr. W.B. Greenough, III, Dr. Stan Becker, Mujibur Rahman and M. Shamsul Islam Khan.

Design & Photography : Asem Ansari

Published by Dr. K. M. S. Aziz, for and on behalf of the International Centre for Diarrhoeal Disease Research, Bangladesh G. P. O. Box 128, Dacca-2, Bangladesh and printed at the BRAC Printers, 66, Mohakhali Commercial Area, Dacca-12, Bangladesh



Village practitioners are attending a lecture on diarrhoeal management

TRAINING OF VILLAGE PRACTITIONERS ON DIARRHOEAL MANAGEMENT IN CHANDPUR SUB-DIVISION

Village practitioners in medicine are one of the most important groups of local health care providers in our rural communities. To most village people, these practitioners form the first line of defence against any illness. These practitioners with few exceptions, have no institutional medical education, but they have learned about the treatments of some common sicknesses from other experienced and institutionally educated physicians. Often they learned it as a family trade.

ICDDR,B's Community Training Project of Chandpur has undertaken training of these village practitioners on diarrhoeal management as a pilot scheme. The training programme consists of theoretical lectures for four days and practical demonstrations of case management for three days dealing with general principles of diarrhoeal management, importance and advantages of early oral rehydration, management of common complications of diarrhoea, preparation of oral rehydration fluid with locally available ingredients, disadvantages of unnecessary use of other drugs, diet during diarrhoea,

general health education on cleanliness, spread of disease through food and water, nutrition, and importance of vaccination against preventable diseases.

At the time of this reporting a total of 67 of these practitioners have been trained in three groups. Contrary to common belief these groups are very eager and enthusiastic about the training programme though they had to forego their practices for several hours a day for seven days and often had to travel quite a distance to come to the training point. This enthusiasm was reflected by the regular attendance of 90% of the trainees during the seven days course.

Lectures were prepared and delivered by Dr. A. S. M. Mizanur Rahman, Investigator-in-Charge of the Community Training Project in preselected points inside community areas.

ICDDR,B INVESTIGATOR ACCORDED STATUS AS AN ASSOCIATE IN *Current Anthropology*

Mr. K. M. A. Aziz, Investigator, ICDDR,B has been accorded the status as an *Associate in Current Anthropology* a world journal of the Sciences of Man, University of British Columbia, Vancouver, B. C., Canada.