

UNITED STATES GOVERNMENT

Memorandum

TO : Mr. Richard L. Podol, Acting Director
USAID/Bangladesh

DATE: July 10, 1979

FROM : Jack M. Rose *Jack M. Rose*
Area Auditor General/NE

SUBJECT: AAG/NE Memorandum Audit Report No. 5-398-79-17
Cholera Research Laboratory (CRL), Dacca, Bangladesh,
Project No. 498-11-510-020

At the request of USAID/Bangladesh, we performed a terminal audit of the Cholera Research Laboratory (CRL) which will become internationalized on or about June 25, 1979. It will thereafter be called the International Center for Diarrheal Disease Research, Bangladesh (ICDDR).

The purpose of this audit was to review the propriety of expenditures made with AID funds and to verify that the project was implemented in accordance with the applicable Project Agreements (ProAgs), AID directives and policies.

The audit covered the period September 30, 1977 (the cut-off date of our last audit) through April 30, 1979. Audit field work was performed in Bangladesh from May 23 to June 18, 1979. Our selective examination of expenditures disclosed no significant deficiencies or exceptions of a reportable nature.

The scope of the audit, background material, and other matters of interest are discussed in the following paragraphs.



Scope

The review was made in accordance with generally accepted auditing standards and included such tests of records, on a selective basis, as were deemed necessary. Our audit was primarily conducted at the CRL in Dacca; however, we also reviewed records maintained by USAID/Bangladesh. We also held discussions with appropriate Mission and CRL officials.

Our examination showed that during the period under audit a total of \$3,300,000 had been granted under two ProAgs, 78-1 and 79-1. At the termination of ProAg 79-1 on June 30, 1979, it has been estimated that almost \$200,000 will remain undisbursed. (Expenditures for the period under audit through April 30, 1979 amounted to \$3,102,481). USAID/Bangladesh recently received authorization to add an additional \$500,000 to ProAg 79-1 to assist CRL in the transition phase to ICDDRB. Thus, approximately \$700,000 of AID funds is to be carried over to this new international entity.

Background

The present CRL in Dacca, Bangladesh (formerly East Pakistan) was created in 1960 under the umbrella of the South East Asia Treaty Organization Cholera Research Program. It was an autonomous laboratory supported with contributions in cash and kind from the U. S. Government acting through the Agency for International Development (AID), and the National Institutes of Health (NIH), and the Governments of Pakistan, the United Kingdom and Australia. The objective of the Laboratory was to develop the means of eradicating cholera, or at least provide methods for its control, because it was recognized that cholera was a major threat to health in Southeast Asia.

In December 1971, Bangladesh became an independent nation and agreements with Pakistan ceased to be operable to CRL. Because the U. S. had not yet recognized the Government of the People's Republic of Bangladesh (BDG), AID entered into a grant agreement with the International Rescue Committee (IRC) as a conduit for providing \$1,260,000 as emergency interim financing of the local currency operating costs of the CRL during the period April 1, 1972 through June 30, 1974.

Subsequently, beginning in May 1974 (ProAg 74-1) through February 1979 (ProAg 79-1), a series of ProAgs totalling \$9,042,000 have been signed between USAID/Bangladesh and the BDG to provide operational funds for the CRL. The funds supported CRL's development and demonstration of improved techniques for the treatment, prevention and control of cholera and other diarrheal diseases; field testing of cholera vaccines and toxoids, and the development of research programs to study diarrheal diseases and other health problems in the area. AID also contracted with the CRL to carryout research to assess the feasibility of establishing a household delivery system of contraceptives in rural Bangladesh.

In 1976, AID/W made it clear to CRL officials that the continued high percentage of funding by AID (over 80 percent) was not in accord with Agency policies and that long term support could only be undertaken as a member of a consortium of donors. The same year, CRL's Directing Council authorized the exploration of converting the CRL into an international institution with AID approval. After almost two years of discussions and negotiations under the chairmanship of the UNDP, composed of interested governments and organizations, including the BDG and the U.S., the President of Bangladesh signed an Ordinance in December 1978 calling for the creation of the ICDDRB.

The ICDDRB will be relevant to the high priority programs and objectives of AID as Section 104 of the FAA "Population and Health" authorizes action in two related areas: (1) for assistance for health and disease prevention including the provision of health services for the great majority, and (2) to increase opportunities and motivation for voluntary family planning. Section 103 of the FAA authorizes programs to help improve nutrition in developing countries. The ICDDRB, which is involved in the basic areas of disease control and related population and nutrition factors, would thus fit the intent of the "new directions".

AID/W reviewed the proposal to move toward creation of ICDDRB and endorsed it recognizing that this could involve a substantial long term financial commitment. The proposal is also supported by NIH, which has had the responsibility for the direction and administration of the scientific program of the CRL through a Participating Agency Service Agreement.

After the President of Bangladesh signed the Ordinance effective December 1978, the UNDP extended invitations for a meeting to potential bilateral donors that was held in Geneva on February 13-14, 1979. Final arrangements were made for the establishment of the ICDDRB as the successor to the CRL.

The meeting, represented by 26 developing and developed countries and multilateral and non-government organizations, endorsed the Ordinance establishing ICDDRB. A Memorandum of Understanding was signed by 16 countries and organizations signifying their intention to support and cooperate in the work of ICDDRB. Indications of support from various agencies amounted to about \$16 million over the next five years, out of a projected requirement of \$27 million.

In accordance with the Ordinance, the meeting selected the first Board of Trustees of the ICDDRB which will hold its first meeting in Dacca beginning on June 25, 1979. Upon the conclusion of this meeting, ICDDRB will become an official institution and the CRL will cease to exist.

ICDDRB will undertake research, training and information dissemination on diarrheal diseases, and directly related subjects of nutrition and population with special relevance to developing countries.

At the Geneva meeting in February 1979, AID committed itself to current and future funding by stating:

"During FY 1979, AID provided \$1.4 million (ProAg 79-1) to the CRL of the BDG to assist in meeting the expenses of CRL through June 30, 1979. Subject to an agreement to be finalized by AID, the BDG and ICDDRB, AID plans to provide for the contribution to ICDDRB of any amounts that may be unexpended under such grant at the time ICDDRB becomes operational. Similarly, subject to final agreement, AID is planning to contribute up to an additional \$500,000 for the remainder of FY 1979."

As mentioned previously, AID/W recently approved this \$500,000 and a revision to ProAg 79-1 is expected to be signed in late June 1979.

As to future funding, "AID also intends to consider annual contributions of up to \$1.9 million in each of the next five fiscal years, 1980 through 1984, subject to the availability of funds and subject to mutual agreement, annually, between ICDDRB and AID to proceed."

AID's contribution is expected to decrease as a percentage of total donor contribution to the operations of ICDDRB. AID will review progress made each year to determine if ICDDRB is implementing its research programs in a satisfactory manner during the period of AID support. If other donors are willing to provide the additional funds to meet ICDDRB's projected budget requirements, AID's goal will be to reduce the U.S. contribution to approximately 25 percent of the total by the fifth year. However, AID should remain flexible enough to adjust to the situation which prevails when the yearly budget decisions are made.

CRL Accomplishments

During the existence of CRL (1961-1979), the U.S. contribution has approached nearly \$24 million (see Exhibit A). The CRL has been in the forefront of research on cholera and acute diarrheal disease virtually since its founding. Its accomplishments include the following:

1. Major contributions to the discovery and elucidation of the true pathological mechanisms of cholera and acute diarrheal diseases.
2. Demonstration that quarantine, a costly measure once widely practised, in fact is not an effective means of controlling the spread of cholera.
3. Performance of the first well controlled field trials of cholera vaccine. These have demonstrated that vaccines so far developed are of limited effectiveness and short duration.
4. The development of a fluid for the intravenous rehydration of cholera victims. It has reduced the mortality in hospitalized cholera cases to less than 0.5 percent (the mortality in untreated cases is from 30 to 60 percent). This same solution has now been found to be a general

nonspecific fluid beneficial in replacement therapy for virtually all diarrheal disease.

5. The development of an effective rehydration fluid given by mouth, for use in hospitals and urban or rural treatment centers. This formula, or slight modifications of it called "oral therapy", is now in use in at least 16 countries and is recommended by the World Health Organization for diarrheal treatment. Dry packets for making this solution are a standard UNICEF stock item.
6. Since 1965 the CRL through its hospitals has served as the cholera and diarrheal treatment center for Dacca municipality and at the Maulab Field Station. CRL currently provides treatment to almost 100,000 patients annually.
7. A recent review has documented more than 500 scientific publications and papers produced by the CRL. This work has led to major advances in understanding the pathogenesis and immunology of diarrheal diseases as well as practical advances in therapy.

In addition, CRL has done much other research on the epidemiology and treatment of other diarrheal diseases due to non-cholera Vibrios, E. coli, shigella, salmonella, viruses, parasites, and other agents. It has become increasingly apparent that much diarrheal disease that has been clinically diagnosed as cholera is not caused by *Vibrio cholerae* and research has been undertaken to determine the origin, epidemiology, diagnosis and effective treatment of these diseases. CRL has also pursued the implications of the causes and control of diarrheal disease into the spheres of nutrition and demography.

Current Situation

The current situation and necessary actions to be taken are as follows:

1. Prior to the meeting of the ICDDRB Board of Trustees, a revision to ProAg 79-1 must be signed adding an additional \$500,000 recently authorized by AID/W to

alleviate ICDDRB's expenses during the transition period. This revision has been prepared by the Mission and we were informed it will be signed between the USAID and the BDG prior to June 30, 1979. As previously mentioned, our analysis showed that almost \$200,000 of the original ProAg amount will remain undisbursed. So with the additional \$500,000, ICDDRB will have almost \$700,000 in carryover funds from U.S. sources.

2. ProAg 79-1, and its draft amendment, contain certain restrictions as to the use of funds granted, e.g., no new contracts with expatriates beyond June 30, 1979, or new orders for any kind of commodities that cannot arrive at CRL prior to June 30, 1979. If CRL is to make use of the carryover funds, these restrictions will have to be deleted. There are a number of expatriates whose contracts extend beyond the June 30, 1979 date. Also, over \$100,000 worth of necessary commodities have been ordered (6/11/78 through 3/16/79) that will not arrive by this date. AID/W has also given authority to delete these restrictions and we were informed the Mission intends to do so.
3. Once the ICDDRB Board of Trustees meets on June 25, 1979, ICDDRB will then be in legal existence and CRL will cease to exist. Consequently, USAID/Bangladesh will have to make a new agreement with ICDDRB for the use of carryover funds. Also, once ICDDRB becomes a legal entity, as per the Ordinance, all assets of CRL will be transferred to ICDDRB. Our review showed that nonexpendable property of an original acquisition cost of about \$1.2 million will be transferred, of which almost \$900,000 was purchased with U.S. funds.

There have been several audits of CRL operations conducted over the years. Our last audit of CRL covered the period October 1, 1976 through September 30, 1977. That report contained three recommendations all of which had been closed prior to the beginning of this audit.

EXHIBIT A

U. S. GOVERNMENT SUPPORT TO CRL
FROM 1961 TO 1979

From 1961 to Liberation 1971 1/

NIH - Research Agreement	\$6,245,900	
SEATO-AID-NIH Research	3,368,200	
USAID Trust Fund & NIH Support(estimate)	<u>3,185,500</u>	
SUB- TOTAL		\$12,799,600

After Liberation to 6/30/79

International Rescue Committee Grant, (AID/CM/asia-G-73-38) 3/17/72	\$1,260,000	
Pro Ag 74-1, 5/15/74	700,000	
" 75-1, 10/29/74	1,000,000	
" 75-1, Rev. 1, 1/29/75	400,000	
" 76-1, 9/19/75	1,140,000	
" 76-1, Rev. 1, 3/15/76	295,000	
" TQ-1, 3/10/76	300,000	
" 76-1, Rev. 2, 6/2/76	265,000	
" TQ-1 Rev. 1, 1/31/77 (Decrease)	(58,000)	
" 77-1, 11/24/76	1,700,000	
" 78-1, 1/3/78	1,900,000	
" 79-1, 2/5/79	1,400,000	
" 79-1, Rev. 1 (to be signed prior to 6/30/79)	500,000	
SUB- TOTAL		10,802,000
Contraceptive Distribution Project-Matlab, (AID/pha-C-1105) 7/1/75 -9/30/78		<u>296,000</u>
TOTAL USG SUPPORT		<u><u>\$23,897,600</u></u>

1/ Source: Available CRL records

EXHIBIT B

SUPPORT TO CRL - OTHER SOURCES 1/
FROM 1961 to 1979

Bangladesh (& Pakistan prior to Liberation)	Cash	\$ 1,189,200
	In-Kind (estimate)	2,846,500
United Kingdom		829,400
Australia		432,000
Canada		147,500
	TOTAL:	<u>\$ 5,444,600</u>

1/ Source: Available CRL records

REPORT RECIPIENTS

USAID/Bangladesh

Director 5

AID/W

Auditor General 1
Auditor General, Office of Policy, Plans & Programs (AG/PPP) 1
Communications & Records Office (C&R) of the AG/EMS 12
Assistant Administrator/Asia (AA/ASIA) 1
Office of Bangladesh, India & Sri Lanka (ASIA/BIS) 1
Bureau for Asia/Executive Management Staff (ASIA/EMS) 1
Office of Development Information & Utilization (DS/DIU) 4
Office of Health (DS/HEA) 1
Deputy Administrator (DA/AID) 1

OTHER

U. S. General Accounting Office (GAO/W) 1
Inspections & Investigations Staff (IIS/Karachi) 1
Area Auditor General/East Africa 1
Area Auditor General/West Africa 1
Area Auditor General/East Asia 1
Area Auditor General/Latin America 1
Area Auditor General/Egypt 1
Area Auditor General, AID/Washington 1