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**ORAL THERAPY EXTENSION PROGRAMME
PHASE II**

HALFYEARLY REPORT TO JUNE 1986.

AUGUST 1986.

BANGALDESH RURAL ADVANCEMENT COMMITTEE
66, MOHALALI C/A
DHAKA - 12

INTRODUCTION:

The second phase of the oral therapy extension programme (OTEP) was started in October 1983 and will run through September 1986. Because of a strategic change to group teaching method (see below), the households originally proposed to be covered by September 1986 was actually completed three months earlier in June 1986. OTEP will however cover the districts of Noakhali, Laxmipur and Feni in southern Bangladesh during the period July to September 1986, which will be funded out of savings from the second phase.

This report gives a summary of the activities for the period January to June 1986 highlighting the strategic changes which were effected during this period. A more detailed report for the whole second phase including those on the coverage of the above 3 districts will be available in October 1986.

STRATEGIES:

Evaluation Results

This period has seen several changes being made into the OTEP strategy. These changes were made out of results from two evaluation studies.

A 2-week evaluation of the programme was carried out in January - February at the instance of the donar agencies. They studied the state of the programme and made valuable recommendations which are now available in the form of a report*.

The other results were contained in a thesis presented by a BRAC staff to the University of London for the degree of PhD. Based on a careful field work of 6 months between July to December 1984, the author

* I. Cornaz and D Pyle, Evaluation of the oral therapy extension programme of BRAC, 1986.

presented several exciting results and made several recommendations*.

IMPLEMENTATION OF RECOMMENDATIONS:

During the period of the report, many of the recommendations have been implemented and incorporated into the programme. Other recommendations are also getting active consideration by OTEP for future implementation. The following gives a summary of the changes that have been made during the period.

A. **Group approach:** The wisdom of OTEP's one-to-one teaching strategy was reconsidered and another approach of teaching a group of mothers instead of a single mother at a time received serious thought. The latter approach was thought and found superior in many respects: more coverage with the same cost, less variation in transmission of message, mutual interaction and reinforcement between the women, etc. There were limitations, as well but on balance, the group teaching approach was found more effective and the programme was switched to this from March 1986.

B. **Revision of 7 points:** The original 10 points of the pilot phase was reviewed and revised to 7 points during the early part of the first phase. Experiences necessitated the revision of the 7 points again. The following changes have been incorporated in the 7 points. (Also see Annexure 1).

a) Previously there was no mention about the use of lobon-gur saline (LGS) in dysenteric diarrhoeas. Mother are now instructed to use LGS in dysentery and if it persists, they should see the doctor.

b) In addition to asking mother to clean the breasts before

* A.M.R. Chowdhury, Evaluation of a community based oral rehydration programme in rural Bangladesh. PhD Thesis, University of London, 1986

giving it to a baby, the mother are now advised to give it to the baby.

- c) The new seven points now instructs to wash the hands with soap or ash after defecation
- d) Signs of dehydration are more clearly stated now (Point 5)
- e) There is a clear message on referral in case of severe dehydration (Point 5)
- f) There is a stronger emphasis now on the necessity of mixing the right quantity of ingredients.
- g) Although not specifically mentioned in the printed 7 points, workers are instructed to use local terms for various forms of diarrhoea in teaching.
- h) As gur is not as widely available in all seasons, mothers are instructed to use sugar if gur is not available.

C. **Pilot testing of Child Survival Programme:** The Child Survival Programme (CSP) is scheduled to be started from October 1986. In order to test the different components of the programme, a pilot project was started in April 1986 in 2 Upazilas: Saturia in Manikganj district and Santhia in Pabna district. ORT teaching was given through the group approach and a roster of families was prepared for each village for immunization purposes. Training to government health officials were provided on different aspects of immunization such as the maintenance of cold chain, motivation to parents and pushing of the vaccine which are still continuing. A 7-day Dai Training has also been held. Experiences from these two upazilas are now being analysed for use in the actual programme.

OTHER ASPECTS

A. **Operational Performance:** During the period 11,53,560 mothers were taught the 7 points which included 2,74,722 mothers reached

through the one-to-one approach and 8,78,838 mothers through the group approach. Detailed results about the performances are given in Annexure-2.

39,913 households were visited through monitoring which included 13,548 covered through the one-to-one approach and 26,365 covered through the group approach. (See Annexure 3).

Analysis of chloride values reflect the past results. There were little difference in chloride results in households covered through the old and new approaches. Chloride results are available in Annexure-6.

- B. **Training:** The period saw a huge operation of training different BRAC staff on group teaching, primary health care, immunization, distribution of Vitamin A, etc. A total of 120 oral replacement workers (ORWs) and 340 programme organizers (P.O.s) were trained during the period.
- C. **Publicity:** The extensive publicity campaign was continued during the period. New materials befitting the forthcoming Child Survival Programme (CSP) were developed and are now being tested for effectiveness.
- D. **Research:** The research staff spent most of their time during the period in working on the data from the impact evaluation. The draft report prepared on the first phase study needed more work. Data collection for the second phase has ended and are now being cleaned.

A major evaluation, looking at the implementation of the programme in areas such as usage, safety, perception, cost, etc., was carried out in collaboration with the London School of Hygiene and Tropical Medicine. Results from this evaluation was

made available in the form of a Ph.D thesis. It is found that the usage of LGS varied from 2 percent to 55 percent depending on how usage is defined and that the usage in the severe type of diarrhoea was highest (upto 55%) which is significant as these diarrhoeas lead to dehydration and death. With respect to the safety of the prepared solution, the evaluation found that the proportion of solution with sodium concentrations in the "dangerous" zone increased as the time between teaching and the data collection increased. The evaluation also found that the perception of the people about diarrhoea and its treatment was not adequate studied which led to a low usage of LGS. Cost of the programme was also studied and the BRAC programme was found to be most cost-effective when the number of mothers taught per unit cost is considered.

DISCUSSION AND CONCLUSION

A six-monthly report of OTEP covering the period between January and June 1986 have been presented. A more detailed report is forthcoming which will cover the whole of the second phase.

The most important aspects of this period are the two evaluations and consequent programme restructuring. As happened previously BRAC has always responded to evaluations in a positive manner. It is hoped that the new changes will make the programme more effective and lead to an early and complete attainment of its objectives.

SEVEN POINTS TO REMEMBER

1. Loose motion, watery diarrhoea, infantile diarrhoea, cholera and dysentery, all these are called DIARRHOEA in general. Water and salt contents drain out from the body with each loose motion. If such loose motions continue for sometime, symptoms like thirst, loss of appetite, vomiting, indigestion and spasms of hands-legs etc. may set in. Diarrhoea leads to malnutrition and sometimes to death. So necessary measures should be taken in time to save the diarrhoea patients.
2. To save ourselves from this disease, we should drink tubewell, tap water. In case of nonavailability of such water, water from other sources should be boiled and then cooled before use. Rotten food should not be eaten. All foodstuffs should be covered well so that flies can not sit on them. Hands and mouth should be washed by soap or pure water before eating. Hands should be washed by soap or ash after return from latrine. Remember that breast-milk is harmless. The children who suck breast-milk from birth rarely have diarrhoea (or suffers from diarrhoea).
3. The treatment of loose motion/diarrhoea is to replenish by any means the water and salt lost. The easiest treatment is to administer oral saline. One can easily prepare this saline at home by using water, salt, molasses or sugar only. In addition, consultation with doctor is advised.
4. Oral saline is to be prepared by mixing a pinch of salt with the help of tips of three fingers and a fistful of molasses in half a seer of water well stirred. Care should be taken to mix salt, molasses and water in right proportion. A fistful of sugar can be used if molasses is not available.
5. Oral saline should be administered immediately after the first loose motion. It may be difficult to replenish the lost water and salt if saline is administered after 2/3 loose motions. As a result, patient will be more dehydrated i.e. eyes will be sunken, tongue dry, fontanelle of children sunken and the patient will become too weak. In such cases, patient should be referred to a doctor.
6. Adult patients should be given oral saline at the rate of half a seer at a time after each loose motion. The children should be given only as much as they want, but at frequent intervals. Once saline is prepared, it may be kept for 6 hours only.
7. Advice on nutrition: During the disease, the patient should be given to take plenty of water and foodstuffs like rice, curry along with oral saline. In case of children, breast milk/normal diet should be continued. Increased amount of food at least for seven days after recovery should be given. This will prevent malnutrition and weakness of the patient and minimise him/her falling victim to the disease again.

DIARRHOEA IS A DANGEROUS DISEASE, PREVEN IT.

Coverage by Area, Upazila and households
From October '83 to June '86

Area	Name of Area	No. of Upazila	No. of Upazila covered	No. of Rural Household	No. of Rural Household visited	% Rural Household visited	Remarks
1	Comilla (N)	5	5	2,57,191	1,80,165	70.05	Completed
2	Narsingdi	5	6	2,28,068	1,97,278	86.49	"
3	Tangail	11	11	4,01,780	3,49,326	86.94	"
4	Mymensingh (S)	6	6	3,00,964	2,60,642	86.60	"
5	Barisal (S)	4	4	1,50,741	1,16,346	77.18	"
6	Bhola	7	6	2,04,370	1,65,789	81.13	"
7	Patuakhali	6	6	1,87,949	1,54,232	82.06	"
8	Kishoreganj	12	12	3,32,790	2,81,756	84.66	"
9	Brahmanbaria	7	7	2,82,716	2,42,448	85.76	"
10	Gazipur	5	5	1,83,667	1,58,877	86.50	"
11	Barisal (N)	4	5	1,52,450	1,13,052	74.15	"
12	Barguna	5	5	1,22,477	1,05,481	86.12	"
13	Pirojpur	8	7	1,94,985	1,52,561	78.24	"
14	Manikganj	7	7	1,80,813	1,43,147	79.17	"
15	Dhaka	5	5	1,77,609	1,42,884	80.44	"
16	Comilla (S)	6	6	3,02,530	2,58,961	85.60	"
17	Mymensingh (N)	6	6	2,61,492	2,14,554	82.05	"
18	Jhalokati	4	4	94,816	72,156	76.01	"
19	Chandpur	7	7	3,13,330	2,06,757	65.99	"
20	Netrokona	10	10	2,61,943	2,07,710	79.30	"
21	Munshiganj	6	6	1,71,424	1,41,508	82.55	"
22	Jamalpur	6	6	2,64,140	2,32,868	88.16	"
23	Sherpur	5	5	1,63,064	1,56,815	96.17	"
24	Narayanganj	5	5	1,65,156	1,55,309	94.04	"
25	Santhia	-	-	-	18,001	-	"
	Total	152	152	53,56,465	44,28,623	82.34	

Area wise Household monitored and Percentage of
monitored Household from Octobr '83 to June '86

Area	Name of Area	Household Visited	Household Monitored	% Households				% of Households monitored
				A	B	C	D	
1	Comilla (N)	1,80,165	9,274	53.33	44.82	1.49	0.36	5.15
2	Narsingdi	1,97,278	9,579	54.32	43.21	2.03	0.44	4.86
3	Tangail	3,49,326	16,785	55.29	42.35	1.93	0.43	4.80
4	Mymensingh (S)	2,60,642	14,000	51.77	46.41	1.79	0.08	5.37
5	Barisal (S)	1,16,346	5,995	49.56	48.17	1.79	0.48	5.15
6	Bhola	1,65,789	8,454	51.06	46.49	2.27	0.14	5.10
7	Patuakhali	1,54,232	7,946	53.12	45.19	1.32	0.37	5.15
8	Kishoreganj	2,81,756	14,302	53.52	45.23	0.99	0.26	5.08
9	Brahmanbaria	2,42,448	12,752	54.13	44.07	1.62	0.18	5.26
10	Gazipur	1,58,877	7,936	56.73	42.53	0.57	0.17	5.00
11	Barisal (N)	1,13,052	5,809	50.92	47.81	1.15	0.12	5.14
12	Barguna	1,05,481	5,386	53.84	44.15	1.69	0.32	5.11
13	Pirojpur	1,52,561	7,300	52.05	46.70	1.22	0.03	4.78
14	Manikganj	1,43,147	7,225	55.71	42.96	1.17	0.16	5.05
15	Dhaka	1,42,884	6,800	60.19	38.74	0.91	0.16	4.76
16	Comilla (S)	2,58,961	11,137	56.66	41.62	1.52	0.20	4.30
17	Mymensingh (N)	2,14,554	6,083	56.69	42.53	0.68	0.10	2.84
18	Jhalokati	72,156	4,361	52.95	46.47	0.58	-	6.04
19	Chandpur	2,06,757	7,187	54.72	45.01	0.23	0.04	3.48
20	Netrokona	2,07,710	5,473	53.85	45.22	0.80	0.13	2.63
21	Munshiganj	1,41,508	3,424	55.80	43.77	0.35	0.08	2.42
22	Jamalpur	2,32,868	8,486	55.53	43.67	0.79	0.01	3.64
23	Sherpur	1,56,815	7,503	54.87	44.69	0.44	-	4.78
24	Narayanganj	1,55,309	4,650	55.55	43.43	0.90	0.09	2.99
25	Santhia	18,001	-	-	-	-	-	-
Total		44,28,623	1,97,847	54.22	44.29	1.29	0.20	4.47

Annexure 4

Area-wise Immunization Coverage Report
period Jan '86 to June '86

Area	No. of Upazila	No. of Union	Ist shot covered	2nd shot covered	Others		Total Shot
					Ist	2nd	
Netrokona	10	10	23596	22775	2393	2093	50857
Chandpur	4	4	12076	11905	264	255	24500
Sherpur	5	5	13101	12654	-	-	25755
Jalalpur	6	6	16887	16310	-	-	33197
Munshiganj	6	6	13796	13356	533	307	27992
Narayanganj	5	5	14374	13662	7	9	28052
Total	36	36	93830	90662	3197	2664	190353

Statistical report on CRP from Jan '84 to June '86

Area	Name of Area	Dai trained	Shebika trained	Colostrum	Patient	Health Meeting		Chula	Supplementary
						Number	Parti		
1	Comilla (N)	299	654	399	2030	4418	33146	334	372
2	Narsingdi	224	402	952	2066	78	1759	969	1137
3	Tangail	586	2757	906	5168	3115	39028	1237	3163
4	Mymensingh (S)	349	834	739	1110	781	10210	229	495
5	Barisal (S)	405	1214	225	847	900	21157	190	234
6	Bhola	355	812	817	2417	429	5998	335	3855
7	Patuakhali	397	754	1015	3444	1998	21199	1148	1074
8	Kishoreganj	767	3281	1409	5020	1713	27709	1461	1323
9	Brahmanbaria	311	1221	1095	7899	8354	155635	696	1352
10	Gazipur	346	733	538	1435	1863	17403	1215	989
11	Barisal (N)	487	1338	912	2255	1640	62569	607	1603
12	Barguna	615	1395	507	3192	786	13248	1030	710
13	Pirojpur	449	1544	836	2641	361	4871	769	567
14	Manikganj	354	2106	811	5991	1048	17466	1118	818
15	Dhaka	151	1164	342	900	1332	12686	1187	458
16	Comilla (S)	496	1910	779	5056	4135	35423	718	709
17	Mymensingh (N)	510	2172	1139	1419	298	5084	1011	1144
18	Jhalokati	217	1327	529	733	558	6960	133	350
19	Chadnpur	266	1295	564	4288	8504	81664	389	445
20	Netrokona	518	-	792	1568	1845	21465	-	1514
21	Munshiganj	185	-	120	362	770	8307	-	204
22	Jamalpur	308	-	620	684	2909	31218	-	1146
23	Sherpur	292	-	589	334	1216	15958	2	920
24	Narayanganj	275	-	437	1026	1419	30216	27	541
	Total	9162	26913	17072	61885	50470	680379	14805	25128

Annexure-6

Distribution of chloride concentration as observed in the programme along with sample statistic's for the month of December '85, January '86, February '86, March '86, April '86 and May '86

Chloride concentration in m.mol/L	Safety and effectiveness	Dec '85	Jan '86	Feb '86	Mar '86	Apr '86	May '86
<30	Safe but less effective	2.24	3.08	3.60	1.61	1.47	1.17
30-99	Safe and effective	92.64	93.52	92.43	93.33	92.27	90.61
100-119	Effective but potentially dangerous	3.66	2.62	2.98	3.80	4.43	6.09
120 and over	Dangerous	1.46	0.78	0.99	1.26	1.83	2.13
Total		5758	6195	6383	6166	4966	4088
Mean		63.65	60.29	59.58	63.11	63.98	68.4
S.D.		20.27	22.65	24.20	21.00	20.92	21.49

BBAC
ORAL THERAPY EXTENSION PROGRAMME (OTEP)
RECEIPTS AND EXPENDITURE STATEMENT
FOR 33 MONTHS ENDED ON 30TH JUNE 1986

HEAD OF ACCOUNTS	A M O U N T	T O T A L
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RECEIPTS

Surplus fund from Phase I	-	28,30,826
Grants:		8,70,37,183
Swiss Development Co-operation	4,07,98,810	
Swedish Free Church Aid:		
DIAKONIA	2,78,72,328	
UNICEF	1,83,66,045	

Interest (Net)	.	4,75,997

		Tk. 9,03,44,006

EXPENDITURE

RECRUITMENT AND TRAINING

Staff Recruitment	5,08,930	
Staff Training	13,06,058	
ORW Refresher Course	2,09,031	
Trainer's Salaries and benefits	1,59,930	
Trainer's Transportation	964	
	-----	21,84,913

O B W T E A M S

ORW Salaries & benefits	1,89,75,792	
Salary & Bnefits of P.O.	1,19,08,292	
Salary & Benefits of Srvicee Staff	19,68,550	
Team Housing & Transportation	48,78,671	
Team Supplies/Initial	4,72,997	
Team Supplies/Operational	42,08,974	
Team Supplies/Promotional	5,52,006	
Team Supplies/Stationeries	3,79,512	
	-----	4,33,44,794

Balance C/O		4,55,29,707

Balance B/F

4,55,29,707

REINFORCEMENT TEAM

REGULAR REINFORCEMENT

Salary & Benefits of P.O.	47,34,084
Salary & Benefits of S. Staff	5,71,438
Team Housing & Transportation	10,67,406
Team Supplies/Initial	64,752
Team Supplies/Operational	5,61,729
Team office Supplies/Stationeries.	1,08,358

71,07,767

SPECIAL REINFORCEMENT

11,48,729

11,48,729

**CONCENTRATED REINFORCEMENT IN
SELECTED AREA**

Salary & Bnefits of P.O.	77,45,577
Salary & Benefits of Srvicee Staff	7,67,476
Team Housing & Transportation	12,26,435
Team Supplies/Initial	2,92,445
Team Supplies/Operational	13,71,631
Team Training	12,26,637
Team Office Supplies/Stationeries	1,01,541

1,27,31,742

AREA FIELD SUPPORT

Area Support Staff salary & benefits	23,24,321
Service Staff & benefits	2,48,111
Office Accomodation and Transportation	19,76,499
Office Supplies/Initial	95,336
Office Supplies/Operational	3,74,462
Office maintenance & general expenses	40,330

50,59,059

Balance C/O

7,15,77,004

Balance B/F

7,15,77,004

ORGANIZATIONAL REQUIREMENT

CENTRAL OFFICE

Land Rover	3,25,000
Micro Computer	10,36,256
Computer Accessories	1,27,763

14,89,019

AREA OFFICE

Motor Cycle	1,08,000

1,08,000

PUBLICITY

Posters	4,73,895
Radio	5,39,011
Television	18,40,238
Newspaper/Journal	2,51,343
Bill Board/display	54,500

31,58,987

LABORATORY

Laboratory Technicians' salary & benefits	1,05,052
Transportation	17,840
Operational	4,30,856

5,53,748

EVALUATION

DATA COLLECTION

Staff Salaries & Benefits	10,25,417
Service Staff salaries & benefits	39,943
Transportation	1,72,425
Supplies	88,741
Printing & Stationery	1,02,842

14,29,368

Balance C/O.

7,83,16,126

Balance B/F.

7,83,16,126

DATA PROCESSING

Staff Salaries & Benefits	8,44,635
Transportation	59,332
Stationery	17,767
Computer time & Data Processing	6,06,402

15,28,136

ADMINISTRATION

Salary & Benefits	22,18,064
Salary & bnefits of Service Staff	2,86,022
Travelling expenses	2,05,174
Office Space Rent	3,30,000
Utilities	1,44,000
Office Supplies	2,14,593
Transport Running cost	3,96,000
General Expenses	1,32,148
Furniture & Fixtures	3,38,463
Head Office Support	7,20,000
Office Equipment	1,53,460

51,37,924

Total Expenditure Upto 30th June, 1986

Tk. 8,49,82,186

Balance of Fund as on 30th June, 1986

Tk. 53,61,820

Tk. 9,03,44,006

Balance of Fund Tk. 53,61,820 is reconciled below

BRAC FUND CONTROL	51,36,733
Cash and Bank Balance at field	10,01,289
Advance and prepayments	1,62,505
Liabilities for expenses	(12,53,962)
In transit	3,15,255

Tk. 53,61,820