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TECHNICAL ASSISTANCE FOR PLANNING URBAN IMMUNIZATION ACTIVITIES

2 - 11 October, 1989

Bangladesh

FINAL REPORT

Resources for Child Health Project

REACH

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TRIP REPORT

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ACRONYMS

CEIS	Computerized EPI Information System
EPI	Expanded Program on Immunization
MOH-FP	Ministry of Health - Family Planning
NGO	Non-Governmental Organization
NNT	Neonatal Tetanus
TT	Tetanus Toxoid
WHO	World Health Organization

ACKNOWLEDGEMENTS

The writer appreciates the kindness and hospitality extended throughout his visit by MOH and REACH staff. Special thanks go to Dr. Jean Paul Chaine and Dr. Shams El Arifeen.

I. PURPOSE

The scope of work for this assignment was:

- Review progress made to date in the REACH EPI intervention.
- Review Urban EPI activities.
- Determine policy and strategic issues which may need resolution.
- Identify appropriate activities for REACH technical and financial support during the period of the no-cost extension until the end of 1989.
- Debrief Mission.

II. TRIP ACTIVITIES

A list of persons contacted appears in Annex 1. Discussions were held in Dhaka with staff at REACH, Ministry of Health - Family Planning (MOH-FP), UNICEF, WHO, and USAID. Staff at the Dhaka Municipal Corporation, ICDDRB and Urban Volunteer Program were also consulted. Four of the nine Zonal offices in Dhaka and a few immunization sites were visited.

Outside Dhaka, a three day field trip in the company of the REACH Chief of Party and the Urban EPI Medical officer was made to Rajshahi and Sirajganj. Discussions in each place were held with MOH-FP staff, municipal corporation staff, UNICEF and WHO field officers. Planning meetings were conducted and visits made to EPI offices and vaccination sites.

III. RESULTS/CONCLUSIONS

GENERAL

Municipal plans have been elaborated. Although EPI is behind schedule in implementing the workplans, much has been achieved in a relatively short time. Services are being methodically planned in each of eighty-eight (88) municipalities. The ward is used as the smallest administrative unit requiring services. Based on population size and distances, the number of sessions required per week per ward is calculated. Shortfalls of staff are corrected either by redeploying or hiring staff. The municipal corporations cooperate by providing health staff and involving ward commissioners. The latter are requested to name potential sites for vaccination within their ward. From this list, the final sites are chosen. An effort is made to recruit female staff.

Government EPI services began in Chittagong in 1988 but were launched in Dhaka only in August 1989. Celebrities and politicians have been involved in inaugurating the Government's urban activities. NGOs have long been active in immunizing.

Within wards, EPI is planning to have one or more vaccination sites. Both fixed and outreach strategies are used. Services are offered by MOH teams, NGO's and at health facilities operated by the municipal corporations.

A new cadre of zonal supervisors has been created to cover the newly-created nine zones of Dhaka. A very quick visit to four of these zonal offices, including a few immunization sites was made. This division into nine zones has so impressed the Dhaka Municipal Corporation that it has adopted these same zones for decentralized delivery of other services.

This consultant is very concerned that the three persons assigned per vaccination session are in many instances being under-utilized. The demand for services is still not very great. Placement of staff and scheduling of sessions has been predicated on 100% coverage of 20% of the total population with an initial two doses of TT and 100% coverage of infants with an average of four visits. However, less than ten children and fifteen women were the norm for most of the daily tally sheets reviewed. Granted, the Dhaka program is still new, but one needs to carefully consider staff efficiency at each stage of program development.

Zonal EPI supervisors need to be encouraged by the Municipal Corporations to assess the location and frequency of vaccination sessions based on their local experience and to make recommendations for action. An army officer who makes a battle plan must be flexible enough to alter it as new information about troop movements comes to light. Very nearby some of the vaccination sessions with little attendance were unserved health facilities seeing many potential vaccinees.

The appearance of idle workers when so much needs to be done undermines the valid complaint heard at higher levels that there is no shortage of good ideas, only of staff. It may become difficult to justify so many EPI staff when other health programs are competing for workers.

Demand creation is one solution. Some of the staff could temporarily be siphoned off and used for social mobilization efforts. Some NGO's have much to teach in that area. Some staff could be used to vaccinate women at garment factories or female school children.

REACH could also financially support teams directly for TT immunization at garment factories. REACH is a potentially fast-moving and flexible mechanism which should be used to fill the gaps based upon discussions and negotiations with MOH and USAID/Dhaka and A.I.D./S&T/HSD.

An alternative to siphoning off staff from a vaccination team is to have fewer sites initially, concentrating services instead in a well-known site offering daily primary health care services (including EPI).

Opinion on the potential usefulness of involving private practitioners varies. A UNICEF source was positive, but a WHO source negative. Therese Blanchet's report on "Perceptions of Childhood Diseases and Attitudes Towards Immunization among Slum Dwellers" (REACH, June 1989) points out that "some lower middle class men who earn well but have little education forbid their wives to take their children for vaccination arguing that, unlike the poor, if their child is ill, they have sufficient money to go to a doctor." Presumably, if doctors also offered immunizations, these women and children could be reached.

Although undoubtedly there would be problems supervising the participation of private doctors to ensure quality control, it is worth experimenting with their involvement in a smaller municipality or in a zone of a larger municipality where coverage is low.

A very interesting overview at the Urban Volunteer Program (UVP) by Dr. Diana Silimperi led to this consultant offering the following suggestions:

-Consider dividing the present immunization referral slips into pre-coded halves, one of which could be left with the health facility vaccinating the child/woman. Supervisors could collect these halves and give feedback to the volunteers as to their relative progress in referrals.

-Document and share UVP lessons learned with EPI on the urban mother's willingness to accept TT early in pregnancy.

-Continue sharing successful UVP experiences on how most effectively to motivate women to accept TT.

-Share information with EPI on placement of vaccination sites.

-Consider a case-control study of neonatal tetanus deaths and matched neonatal survivors to determine whether there is replacement mortality or whether neonatal survivors have the same chance of mortality as the general population.

SOCIAL MOBILIZATION AND COMMUNICATION

Unfortunately, Mrdula Amin, the REACH communications specialist, departed for a three week home leave the same day this consultant arrived. Judging from an ample trail of "communications and products," it seems she has been very productive. She is assisted within the EPI section by Shahnaz Perveen, with whom discussions were held. UNICEF is very active, as well.

Everywhere one goes in Dhaka one is accosted by Muni within his "safety seal." Muni is the baby pictorially adopted by EPI as a logo. He can be found on city walls, matchbooks, and rickshaws.

An ambitious workplan for social communication has been prepared. Much has been accomplished. What is not clear, however, is what difference, if any, these efforts will make in the urban areas. Is the Muni logo not only

recognized but understood? As part of any 30-cluster coverage surveys planned in Dhaka and elsewhere, questions should be asked on where the informant learned of EPI.

Special efforts must be made specifically to motivate all women of childbearing age to receive TT. The deployment of urban teams and frequency of urban clinics assumes that over two-thirds of the workload of immunization staff will be devoted to giving 20% of the population an initial series of two doses of TT. Communications efforts must reflect this priority on TT. A recent effort to recruit female vaccinators is noteworthy.

The consultant reviewed the first draft of a television script for a soap opera. The technical content could be improved, but overall there were no major objections. It is important that technical EPI staff be involved during production, as well. For example, the baby who needs to be taken for polio shots should be recognized as a very small baby and not a toddler. Also service sites will need prior warning whenever any messages are aired, so as not to run out of stock.

There are no lack of ideas. A weekly radio show directed to health workers and answering their letters from the field might be useful. Or a self-winding and playing VCR and monitor screen could be securely installed at busy train or bus stations or docks.

EPI staff at the MOH-FP, WHO and UNICEF were all interested in the idea of using schoolchildren experimentally for social mobilization within a smaller municipality or within a zone of Dhaka.

Schools are more widely distributed than health facilities and attendance is high. In selected municipalities, it would be useful to harness the natural competitiveness of children by having schools (or classes within the same school) compete for the highest number of infant referrals to the normal service delivery points.

Simple lesson plans for teachers can be prepared and students required to give coded "appointment slips" to nearby houses with infants. The class (or school) contributing the highest number of referral slips at the service delivery points over a one-month period wins. Results should be posted weekly at schools to stimulate participation. Students get badges, winning school class gets trophy, principal (teacher) gets new desk or similar idea. This attempt to educate schoolchildren, inform the public and raise coverage should be in support of and non-disruptive to the routine sustainable EPI service.

TETANUS

1. The neonatal tetanus (NNT) elimination plan for Bangladesh, presented at the Regional EPI Consultative Meeting in Bali in June 1989, deserves support from all agencies. Measles and NNT are the two greatest killers from among the vaccine-preventable diseases in Bangladesh.

2. The strategies to eliminate NNT must be flexible and consider local factors. For example, in selected areas where primary school female

attendance is high, opportunities should be take to immunize all school girls with two doses of TT. In subsequent years, two doses could be given to those in first grade and one in second, third, and fourth grades. Some countries have eliminated NNT with infant DPT and school DT programs. These five doses, properly spaced, provide long-lasting immunity to cover the childbearing years.

3. Present efforts to make NNT a notifiable disease, reported separately from other tetanus, are laudable.

4. The present card for recording TT needs to be revised. While it is essential to categorize women according to "pregnant" or "not pregnant" on daily tally sheets, this information does not belong on the TT card. As it now stands, the woman's pregnant/not pregnant status is recorded on the card one time only, although there are spaces for up to four doses of TT. Also, the question reinforces the impression that only pregnant women need TT. The health worker is to tick the month of pregnancy (three through eight).

5. WHO recommends that TT be given on the first contact, at any time during pregnancy. WHO also recommends five (not four as in the present card) doses of TT. The advice on the front of the card does not correspond with the duration of protection from two doses of TT, which is three and not five years. These policy changes should be adopted by the MOH and reflected on the cards and forms.

6. Several coverage evaluation surveys in first phase upazilas were conducted early in 1989 and found high TT2 coverage (mostly around 80+ percent). This is a noteworthy achievement. In the future, EPI should conduct surveys using the latest WHO methodology. Mothers of children currently 0-11 months of age should be asked about their lifetime history of TT prior to the birth. One can then determine whether the birth was protected based on the duration of immunity provided by all doses of TT.

7. Greater emphasis on NNT is needed in the media and communications materials being produced especially since this is one of the diseases recognized and feared by mothers. The findings from Therese Blanchet's study on "Perceptions of Childhood Disease and Attitudes towards Immunization among Slum Dwellers"(REACH, June 1989) need to be studied and applied to communications materials.

8. REACH could financially support TT teams to immunize in garment factories and in schools. Alternatively, EPI could designate staff from among fixed or outreach teams who can be used for this purpose. Presently, each of the three persons on teams at vaccination sites are not fully utilized.

9. The commitment of national authorities to NNT elimination could be enhanced by conducting a national workshop for the accelerated control of NNT, along the lines REACH and WHO have sponsored in Africa.

CEIS

The computerized EPI information system (CEIS) has been installed at EPI by Dinesh Gupta, REACH MIS advisor. Mr. Gupta has visited Bangladesh three times.

The system is up and running. It is being used to generate useful coverage data. (See Annex 2). The JSI Joint Administrative and Financial Officer, Milton D'Silva has been providing EPI with follow-up technical assistance whenever bugs need to be worked out. This has been very much appreciated by EPI.

Mr. D'Silva has prepared a list of areas needing improvement for easier future installations and for future MIS consultancies to Bangladesh (See Annex 3). He has agreed to develop a system for retrieving summary municipal data from within the upazila data (see point 4, Annex 3).

Similarly, the urban EPI staff need to be able to analyze coverage data by ward and urban zone. This will help them to focus efforts on poor performance areas and to share results with the respective ward commissioners.

Administrative divisions and boundaries do change from time to time and more local demographic data is sometimes available. Local MIS staff would like to reflect these changes in CEIS, but are unable without additional documentation (e.g., source codes) to make the required changes.

EPI needs to consider the periodicity and nature of feedback to each operational level, now that CEIS has begun to produce useful data. While not yet perfect, CEIS in Bangladesh has evolved to a point where EPI staff from other countries could benefit from an observational tour to Dhaka.

Some areas of improvement of CEIS can be suggested:

1. Performance of administrative units, health facilities and vaccination teams could be monitored and ranked, with regular feedback to encourage a spirit of competition.

2. Either by counting daily tally sheets or daily vaccine indents, EPI should track the number of vaccination sessions actually conducted per municipality each month. Much effort is being concentrated on methodically planning a monthly schedule of sessions. It is now time to monitor the actual versus planned number of sessions, so that continuing low coverage can be confidently attributed to low output per session and not to cancelled sessions. Knowing the number of sessions actually conducted can be used to determine the average number of children (DPT 1,2 and 3) per session and to audit expenses associated with vaccine collection by outreach teams.

3. EPI urban staff are not administering measles vaccination to the extent possible, given corresponding levels of DPT coverage. To track this, CEIS should permit measurement of "measles vaccination screening efficiency." Each child over 12 months old who receives DPT 1 also needs to be given measles. In addition, many children getting DPT 2 and 3 would also need measles. Therefore, conservatively the number of measles vaccinations should at least equal the number of DPT 1 in the age group more than 12 months old. EPI should systematically monitor the following ratio in each administrative area:

$$\text{Measles vaccination screening efficiency} = \frac{\text{No. of measles vacc. in children} > 12 \text{ mos. old}}{\text{No. of DPT 1 vacc. in children} \geq 12 \text{ mos. old}} \times 100$$

This ratio can crudely point to geographic areas or health facilities where missed opportunities for measles immunization need to be investigated further. (An example using hypothetical data is given in Annex 4). CEIS should be modified to allow input of service statistics by antigen and dose for $\geq$ 12 months, as well as for less than 12 months age groups.

4. To complement the present CEIS graphic ranking of coverage levels by district, EPI should consider introducing a monitoring tool in use in Indonesia's EPI. An example using actual data from Indonesia is in Annex 5. The width of the columns on the "x" axis is proportional to the provincial population size. The white (unshaded) areas represent unimmunized populations. Using this graph, program managers can determine which administrative units are responsible for low national or municipal overall coverage levels. For example, although Polio 3 coverage in Kalimantan is 52% and less than the 62% in Sumatera, the latter district still has many more unimmunized children by virtue of its larger population. This type of graph will identify critical "low coverage" areas, based not only on the traditional measure of percent coverage but also on the number of non-vaccinated persons. The UNICEF EPI Senior Planning Advisor, Dr. Noto Abiprojo, has much experience using this monitoring method and should be consulted further on this tool by the MOH-FP.

5. As a proxy measure of immunization acceptability, drop-out rates should be monitored by district. Drop out rates in Bangladesh are higher than in any other country in the South East Asia Region of WHO. (See Annex 6.)

IV. TECHNICAL ASSISTANCE NEEDS

The following prioritized menu of activities has been discussed with key urban EPI staff. REACH would be prepared to support them with technical and/or financial assistance.

The list is not immutable or static. New ideas should also be considered. JSI and MOH staff should begin to think about the following activities which will require technical assistance in the coming six months and over the next four years.

1. Conduct a Mid-Term Review of USAID/MOH-FP Urban Immunization Activities in Februrary 1990.

2. Conduct thirty-cluster coverage evaluation surveys, with at least one per large municipality per year. Better yet, a survey could be done in each zone in Dhaka. Such community surveys complement and validate routine service statistics.

3. Support the sentinel surveillance system.

4. Participate in child-to-child EPI effort with a NGO to use school children as motivators. CARE is very active in this area.

5. Prepare and conduct a series of division-level seminars for senior hospital administrators, pediatricians, medical college professors, and MOH policy makers on recent advances in immunization and missed opportunites for immunization. A senior EPI "guru" would be required. A packet of essential documents on immunization should be provided to each particpant.

6. Conduct a seminar to request the opinion of medical school pediatricians, nursing school trainers, curriculum developers, pediatric societies, etc. about current EPI training modules. This would serve a hidden agenda of exposing them to the WHO materials, getting them to advocate, review, and improve EPI curricula with particular emphasis on practical training.

7. Conduct a national workshop for the accelerated control of NNT, along the lines of the REACH and WHO-sponsored inter-country workshops in Africa, to enhance national and district commitment and know-how for NNT elimination. Multiple agencies would probably be interested in co-sponsoring such a workshop.

8. Conduct "75 nearest households" surveys, where a health worker determines coverage in the nearest 75 households. This is a motivational as well as monitoring exercise, which would make good use of some of the presently idle workers.

9. Conduct a study within a large hospital of post-vaccination reactions in healthy and ill children. This would be used to convince physicians to adopt the WHO/MOH-FP recommendations on contraindications.

V. RECOMMENDATIONS

The following recommendations are listed by priority:

1. Assist Municipal Corporation staff to encourage their front line officers and the zonal EPI supervisors to assess the location and schedule of vaccination sessions based on their knowledge of local needs and make recommendations for action. A one-day workshop for micro-planning to elaborate and share zonal workplans would be useful.

2. Concentrate services in well-known fixed sites offering a daily package of primary health care services, including EPI.

3. Decrease the number of newly planned "vaccination only" sites. This will result in more efficient use of vaccination staff, since present staffing unrealisticly assumes that 100% of the eligible population is demanding services. Mapping the public/NGO service delivery points for each zone should help determine placement of new vaccination sites.

4. Use REACH funds to hire mid-level staff on a case by case basis to catalyze municipal programs. Planning and implementing municipal acceleration needs to be done concurrently in all unserved municipalities. DMC zonal officers can serve as trainers for micro-planning excercises in the other municipal programs.

5. Until demand for services is higher, either use some of the vaccination staff for social mobilization, or for giving TT at garment factories or at schools. Alternatively, hire TT teams using REACH funds in order to ease the initial burden of reaching the enormous unimmunized backlog of women of childbearing age.

6. NGO's involved in family planning and MCH should be encouraged to continue their excellent participation in EPI. They have learned important lessons over years of delivering immunization services. These issues need to be shared with the MOH-FP.

7. Develop a plan for feedback and use of CEIS data at each level. Consider ranking administrative units, health facilities or teams according to coverage levels; measure "measles vaccination screening efficiency" using routine service statistics in children 12 months of age or older; monitor the <u>number of unimmunized</u> per administrative unit (in addition to the more traditional percent coverage); and monitor drop-out rates as a proxy measure of immunization acceptability.

8. Improve the present quality and timeliness of supervision by ensuring that current headquarters-based EPI supervisors also supervise municipal activities during their field trips and de-brief urban immunization staff in Dhaka.

9. Experiment with the use of practioners in their private clinics to vaccinate children in a zone of a large city or in a smaller municipality. Identify operational issues related to their

participation. Physicians need to be educated about EPI schedules, contraindications, missed opportunities, and the cold chain.

10 Increase efforts to motivate women of childbearing age to get TT. The sheer numbers requiring immunization are enormous and lend themselves to a communications and service delivery catch-up campaign. Systematically work with imams to spread the message.

11 The MOH-FP should consider adopting several WHO recommendations concerning neonatal tetanus (NNT). TT should be reported separately from other tetanus. TT should be given on the first contact any time during pregnancy. A total of 5 doses are required to provide protection through the childbearing years. Present TT cards and reporting forms would need to be changed to reflect these policies. As a long-term strategy, TT should be offered each year to schoolchildren in the early grades before attrition in areas of high enrollment. Future coverage surveys should follow current WHO guidelines and question mothers of children 0-11 months old about their lifetime history of TT prior to the birth of the child.

12. Include questions on where the parent heard about immunization during the standard 30-cluster coverage surveys

VI. **FOLLOW-UP ACTIVITIES**	**WHO/WHEN**
1. REACH and EPI should select the most useful from among the menu of technical activities (Section IV).	Chaine/Arifeen Dec. 1, 1989
2. Using actual Bangladesh data, prepare a graphic display for by district of "measles vaccination screening efficiency" (See Annex 4) and "percent vaccination coverage and non-coverage" (See Annex 5). Assess the continuing utility of such tracking tools.	Chaine/D'Silva Dec. 1, 1989

ANNEXES

ANNEX 1

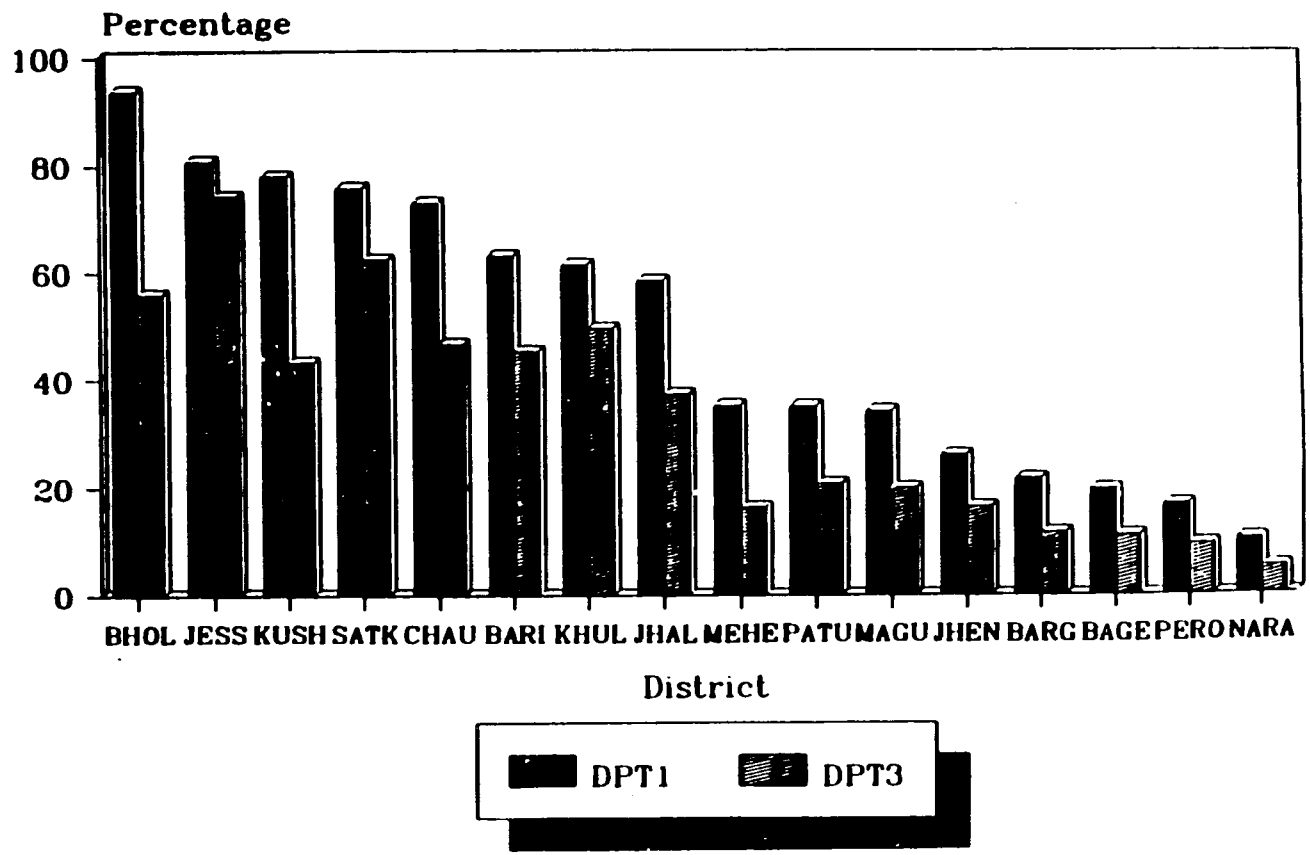
People met	Title	Duty Station
Mr. Gary Cook	Director, OPH, USAID	Dhaka
Ms. Jinny Sewell	Deputy Director, OPH, USAID	Dhaka
Ms. Kathleen McDonald	EPI Project Officer, USAID	Dhaka
Dr. Jean-Paul Chaine	COP, REACH	Dhaka
Dr. A.K.M.L.R. Talukder	EPI Director	Dhaka
Dr. Napisha Begum	Deputy Director, EPI	Dhaka
Dr. S.E. Arifeen	Medical Officer, EPI	Dhaka
Col.(Ret.) M. Sabur	Chief Health Officer, DMC	Dhaka
Dr. M.D. Ashrafuddin	Deputy Health Officer, DMC	Dhaka
Dr. R.N. Basu	EPI Medical Officer, WHO	Dhaka
Dr. Noto Abiprojo	EPI Sr. Planning Adviser, UNICEF	Dhaka
Dr. Vincent Fauveau	MCH Medical Officer, ICDDR,B	Dhaka
Dr. Diana Silimperi	Dir. Urban Volunteer Program	Dhaka
Mrs. Jahanara Begum	Community Health Services Coord., Urban Volunteer Program	Dhaka
Mrs. Shahnaz Perveen	EPI Communications Officer	Dhaka
Mr. Kushi	Municipality Chairman	Sirajganj
Dr. Naseem Reza	Medical Officer, EPI	Dhaka
Dr. Iqbal Hossain	Operations Officer, EPI	Rajshahi
Mrs. Nazrana Hussain	Statistical and Evaluation Officer, EPI	Dhaka
Dr. Mohamed Musa	TICA Coordinator, CARE	Dhaka
Mr. Milton D'Silva	Joint Admin./Fiscal Off., JSI	Dhaka
Mr. Iqbal Kamal	Financial/Admin. Officer, REACH	Dhaka

ANNEX 2

COVERAGE DATA

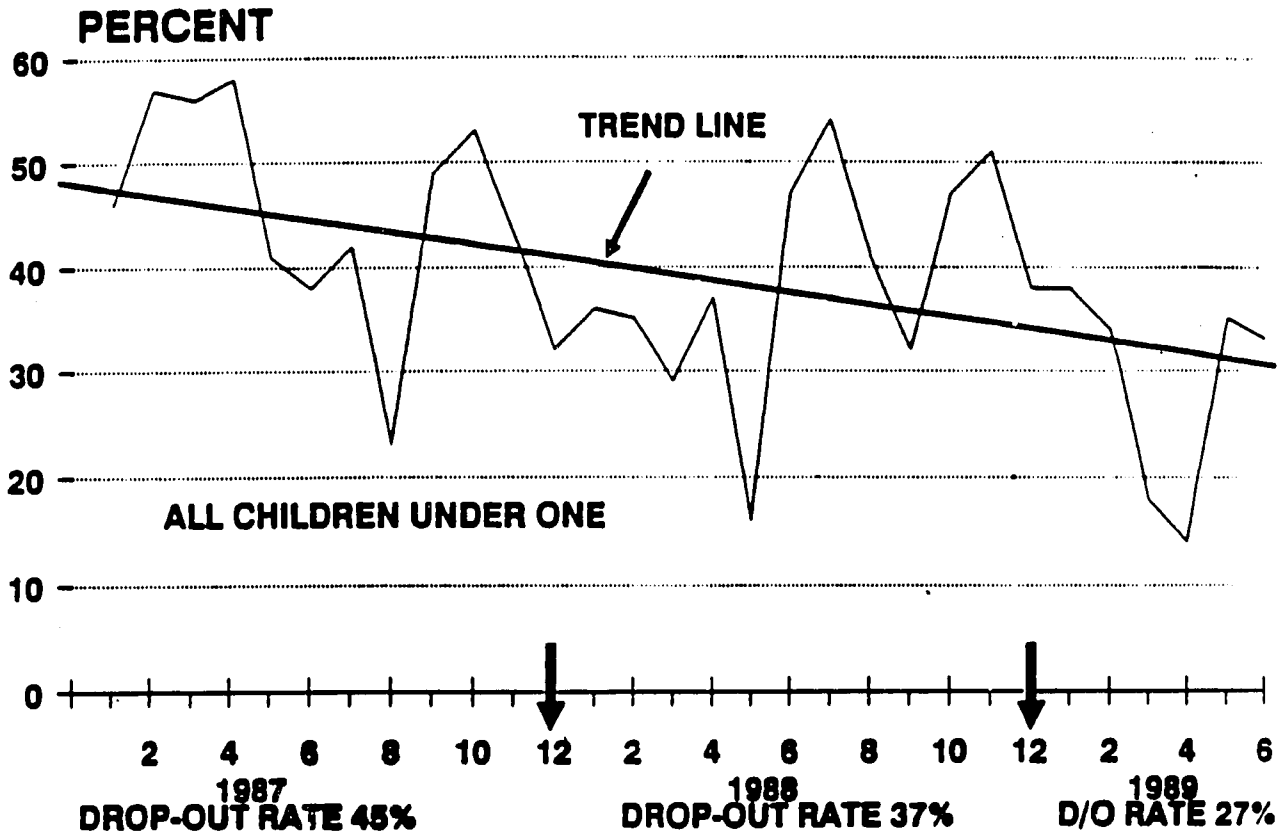
Immunization Coverage, 1988/89

Division:Khulna, Children < 12 Months

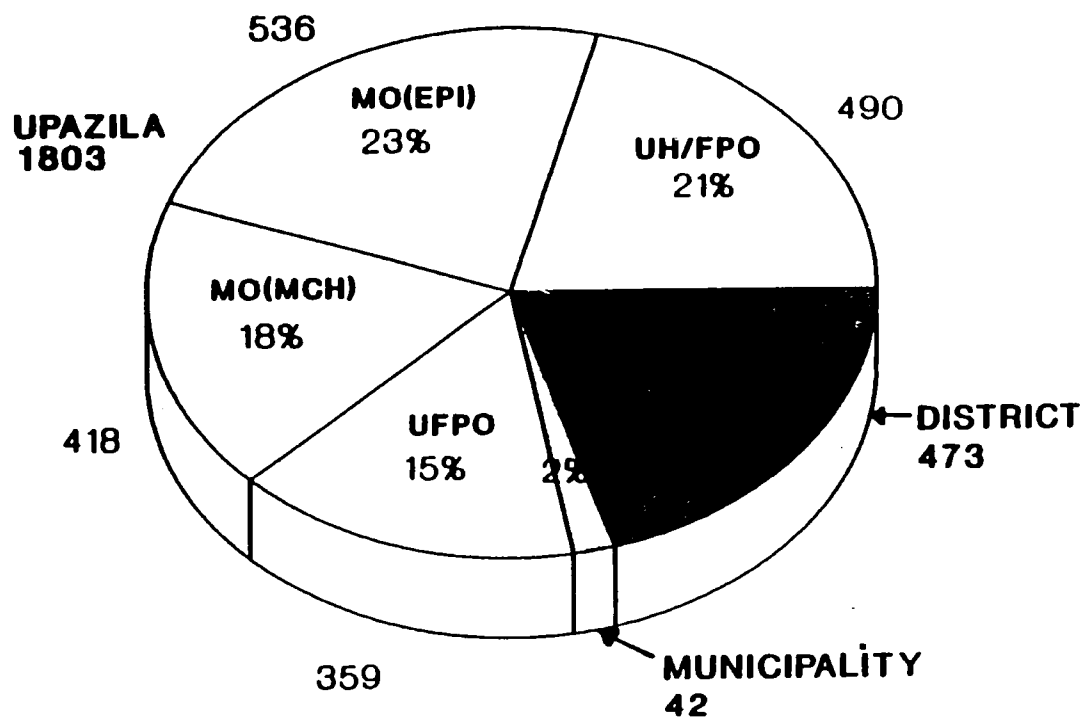


July 88-June 89

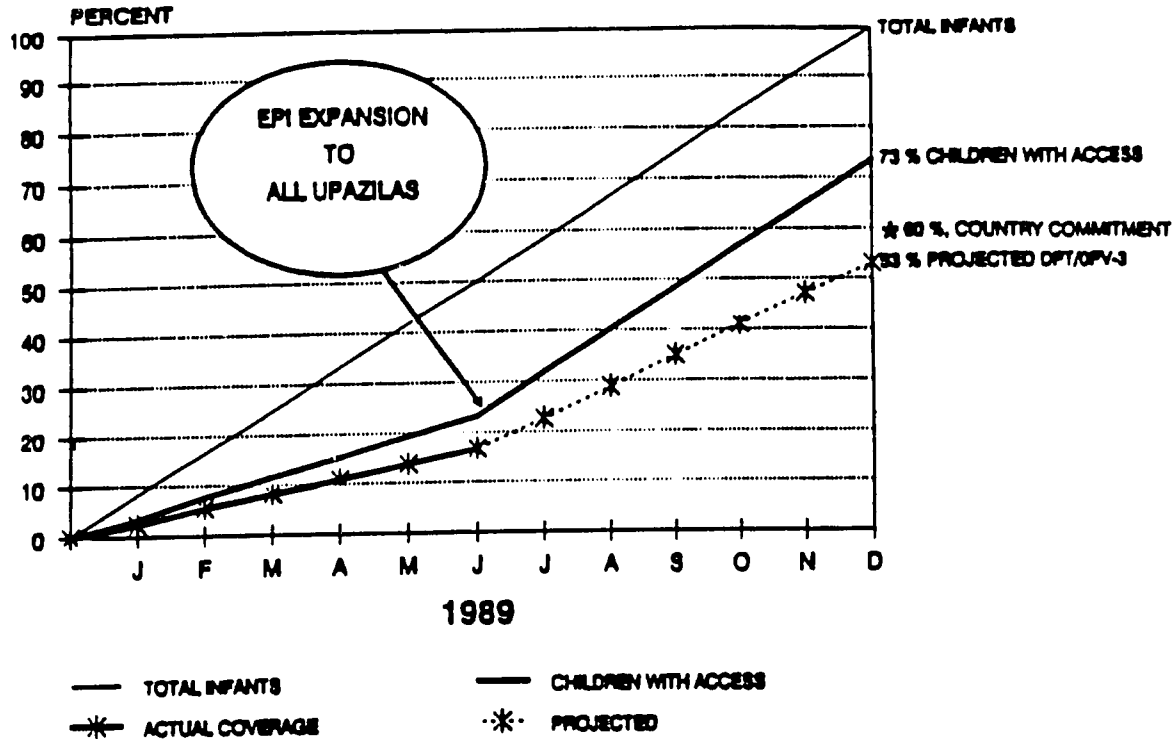
MONTHLY DROPOUT RATES 1\87-6\89 FROM DPT-1 TO DPT-3 BANGLADESH



CATEGORIES OF THE MIDLEVEL MANAGERS TRAINED IN EPI (1986 -89) TOTAL 2318



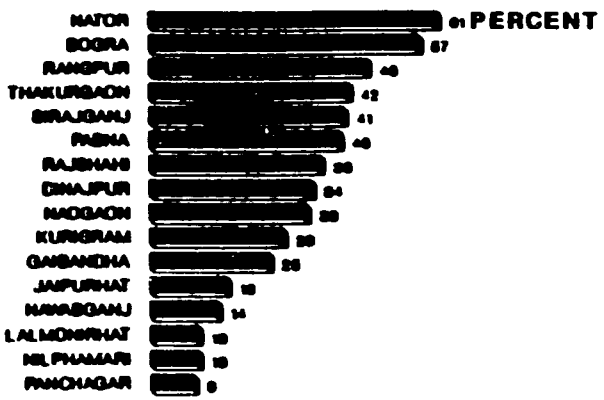
COUNTRY WIDE ACCESS AND EPI COVERAGE BANGLADESH



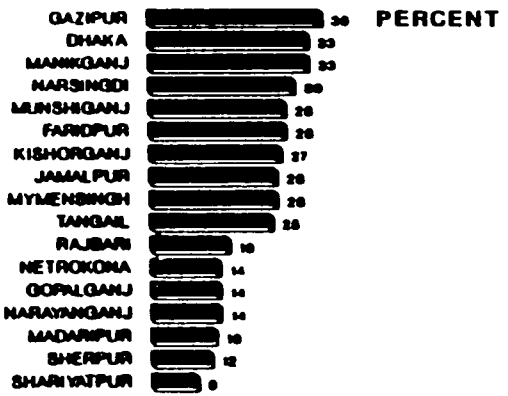
ADDITIONAL EFFORTS

- REDUCTION IN DROPOUT RATE
- ADDITION VACCINATION DAYS FROM 1 TO 2 DAYS PER WEEK
- PARTICIPATION OF DISTRICT ADMINISTRATION / EDUCATION / LGRD / SWWA
- 3 MINUTES FOR CHILDREN - PRIME TIME TV/RADIO
- IMRAN KHAN / AUDREY HEPBURN VISITS FOR URBAN MOBILIZATION
- DISTRIBUTION OF 1 MILLION POSTERS
- DISTRIBUTION OF 200,000 INFORMATION PACKETS TO MOSQUES, IMAM'S TRAINING
- NGO MOBILIZATION

RAJSHAHI DIVISION (DPT/OPV-3)

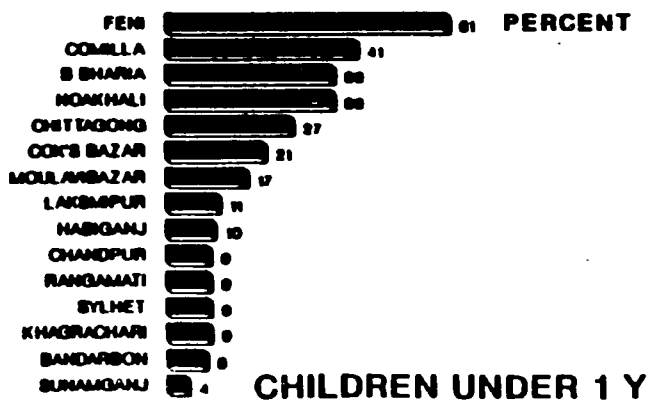


DHAKA DIVISION (DPT/OPV-3)

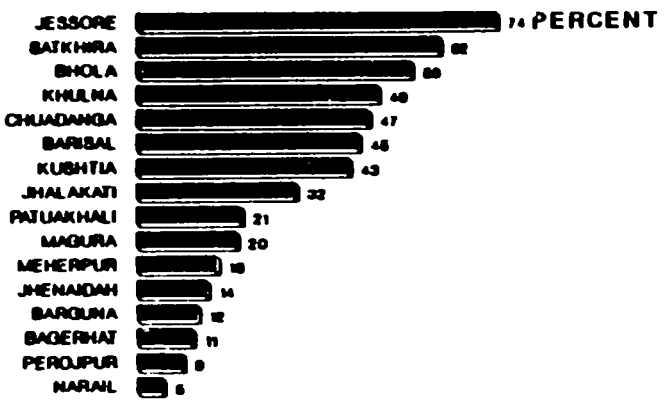


COMPARISION OF DISTRICTS BY DIVISION (JULY 1988 - JUNE 1989)

CHITTAGONG DIVISION (DPT/OPV-3)

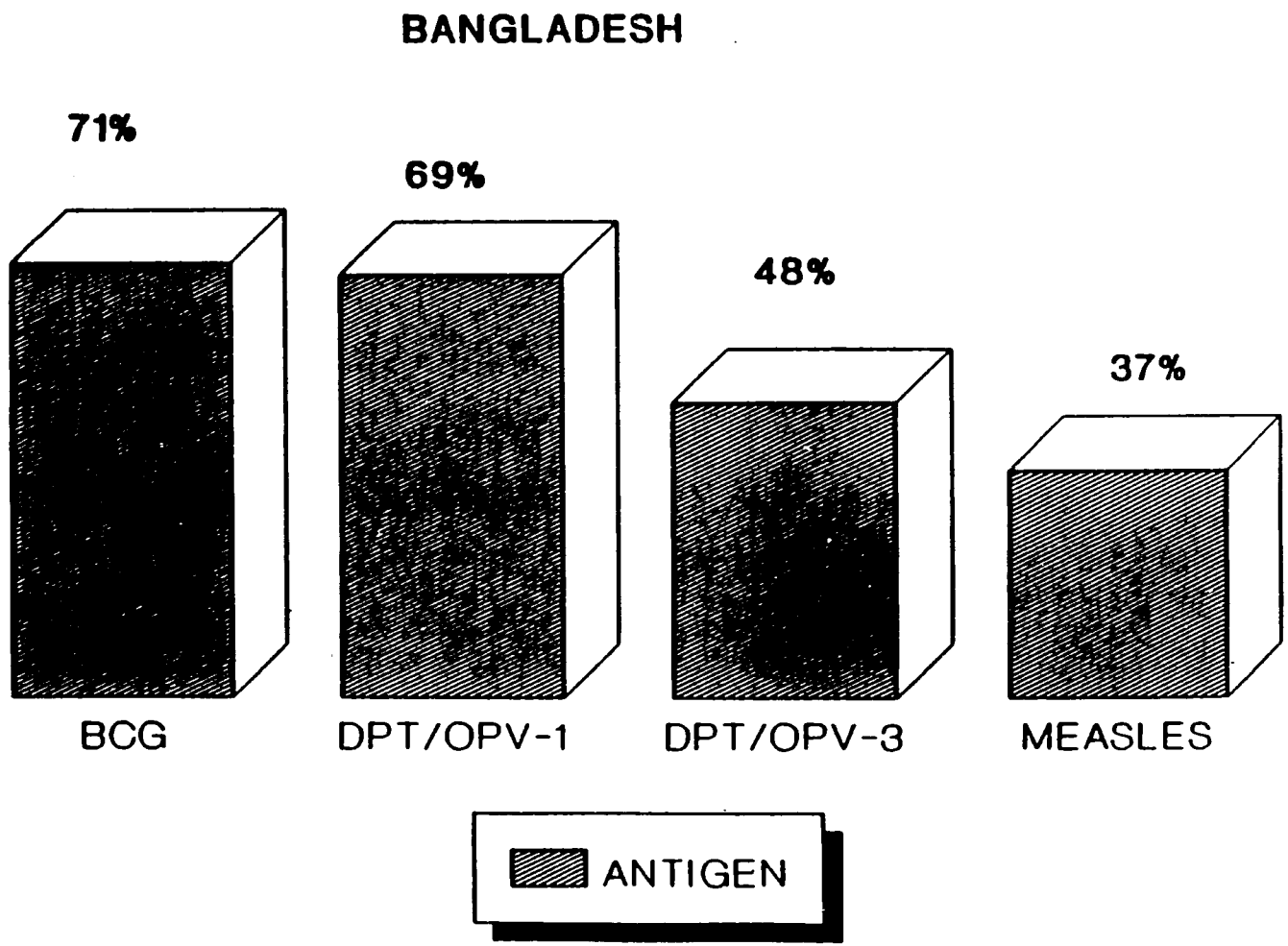


KHULNA DIVISION (DPT/OPV-3)



CHILDREN UNDER 1 YEAR

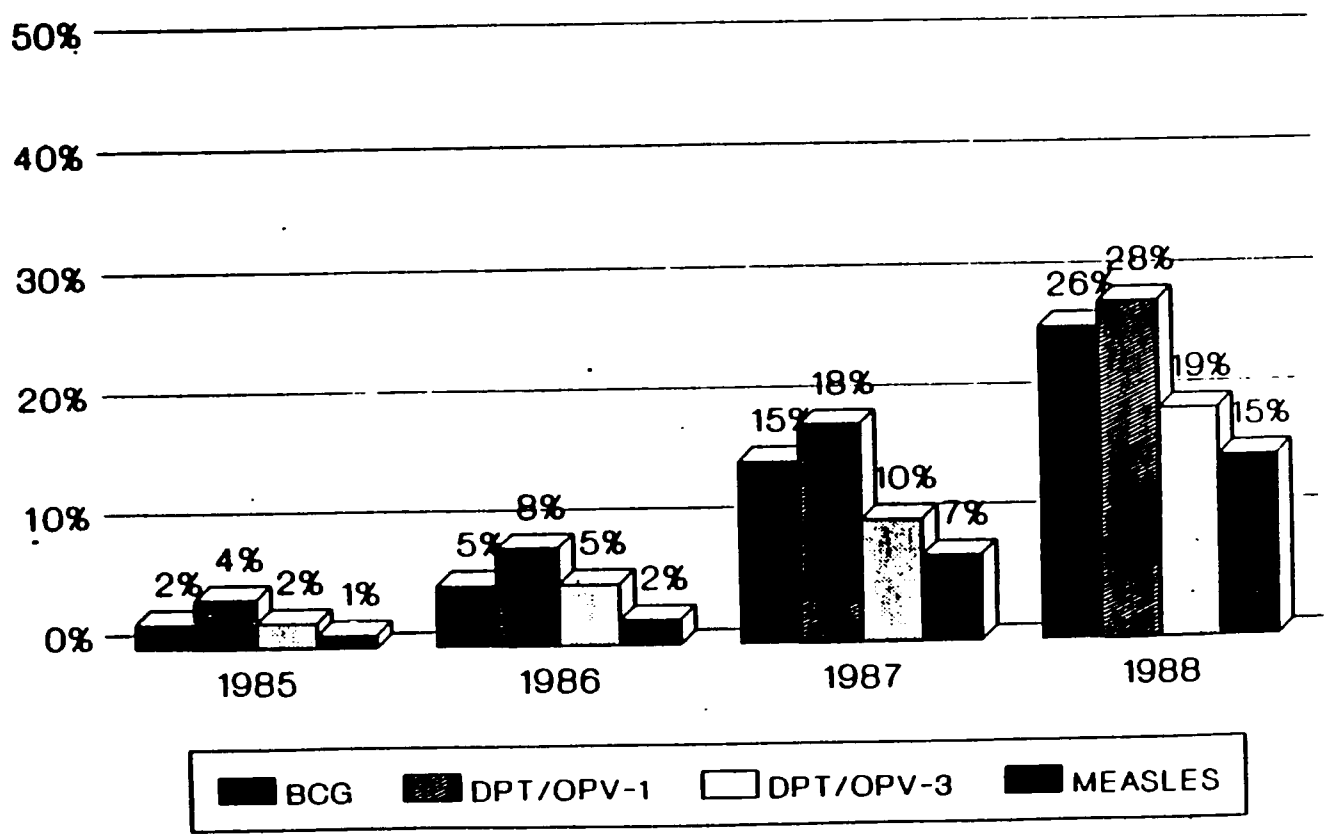
EPI COVERAGE IN 190 PHASE 1-3 UPAZILAS
JULY 1988 - JUNE 1989



CHILDREN UNDER ONE

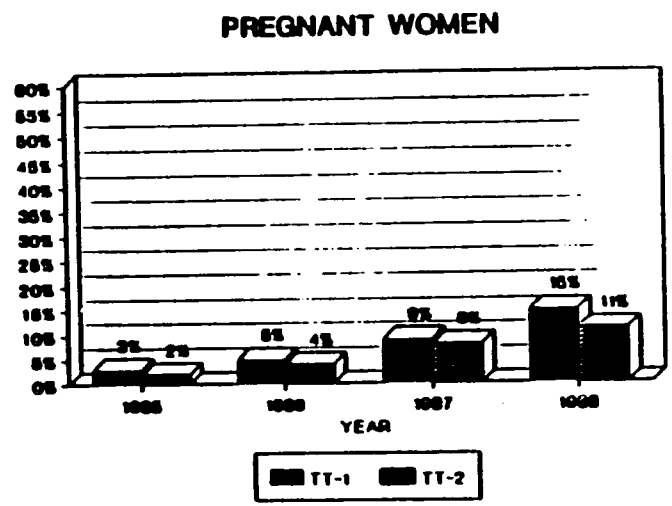
19.

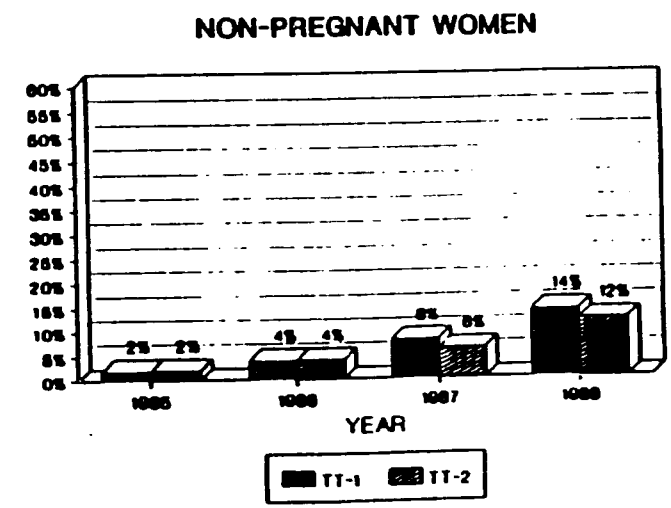
EPI COVERAGE 1985 - 1988
BANGLADESH



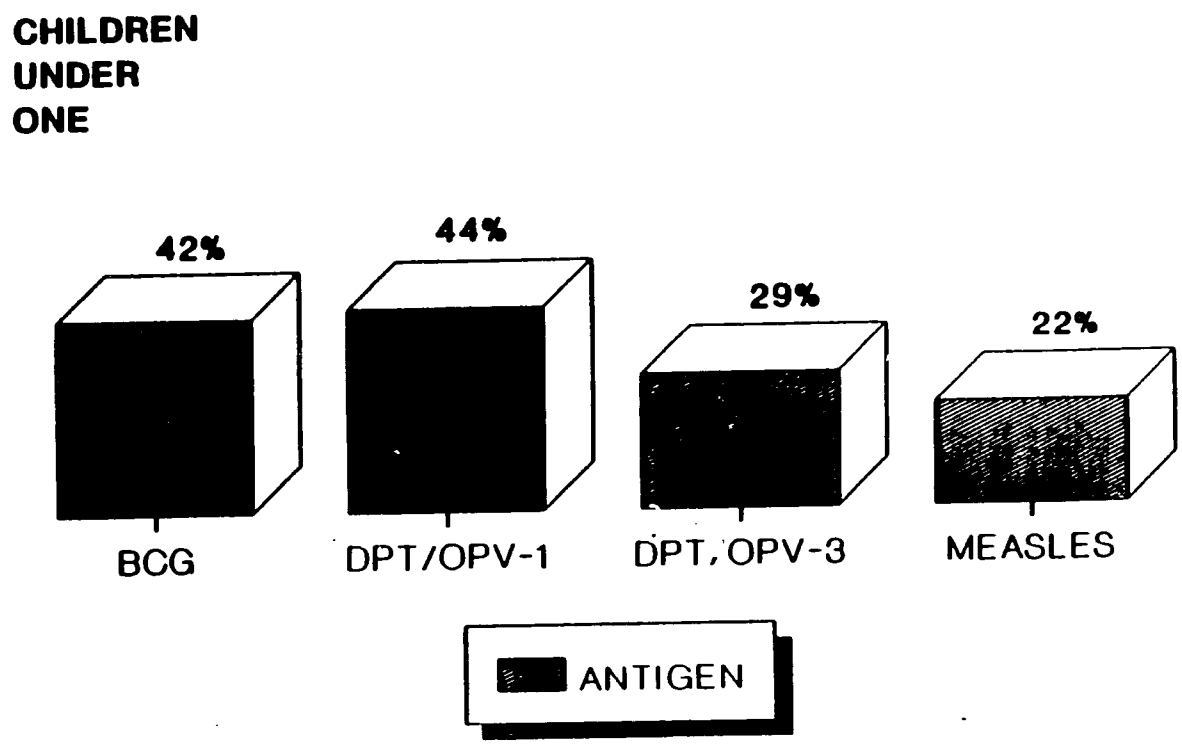
CHILDREN UNDER ONE

VACCINATION OF PREGNANT AND NON-PREGNANT WOMEN FOR TT BY YEAR BANGLADESH





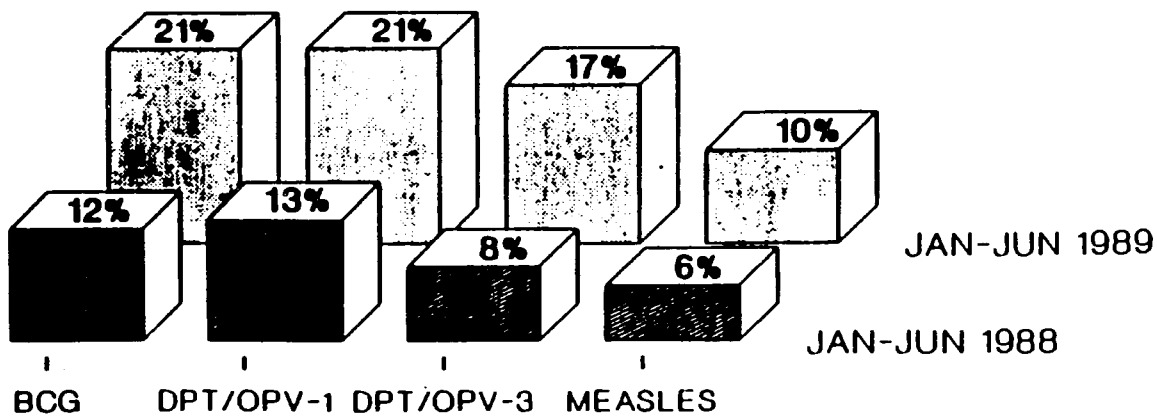
EPI COVERAGE BY ANTIGEN
JULY 88 - JUNE 89
BANGLADESH



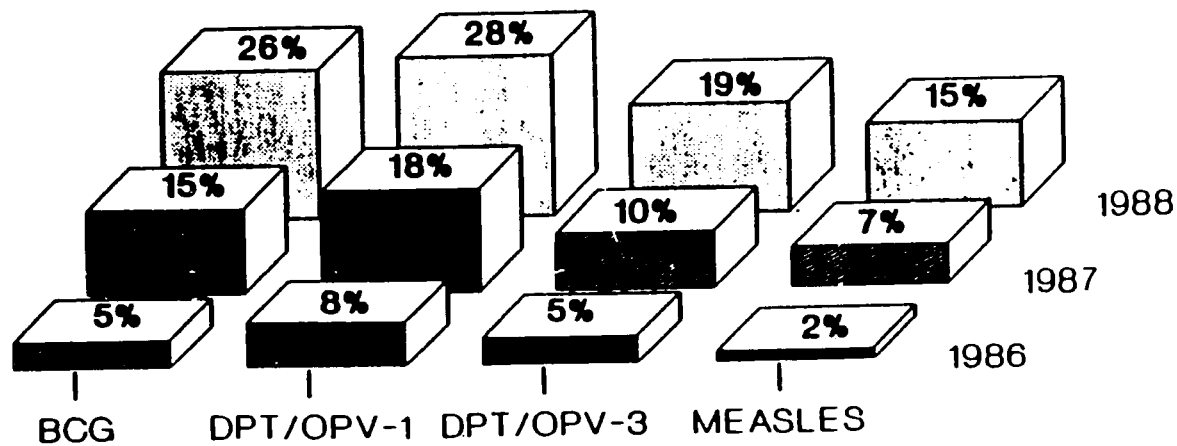
22

6 MONTH COVERAGE COMPARISON
CHILDREN UNDER ONE

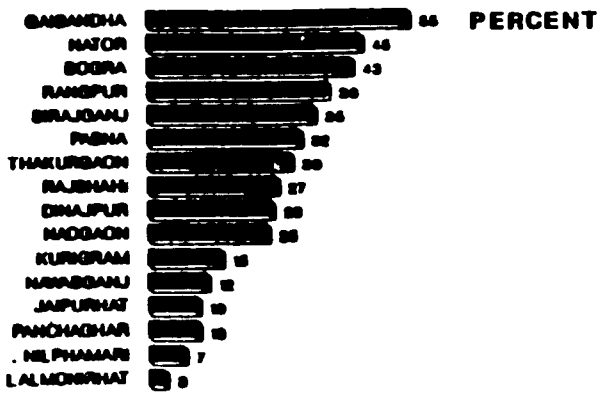
BANGLADESH



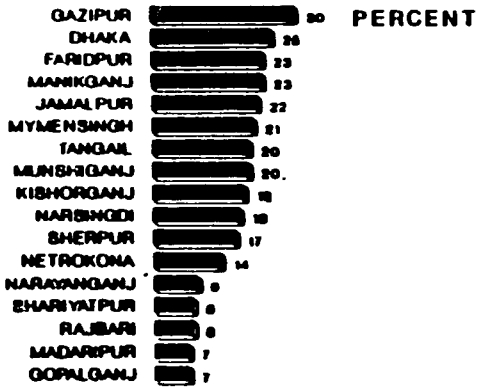
INCREASE IN EPI COVERAGE FOR UNDER-ONE CHILDREN BANGLADESH



RAJSHAHI DIVISION (MEASLES)

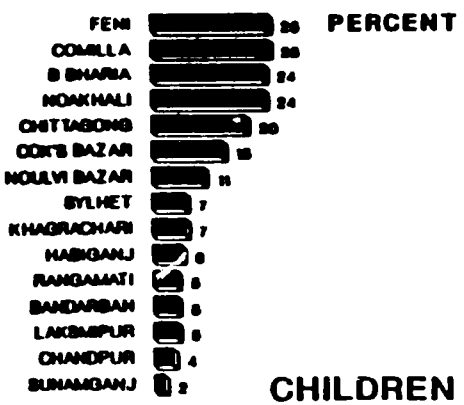


DHAKA DIVISION (MEASLES)

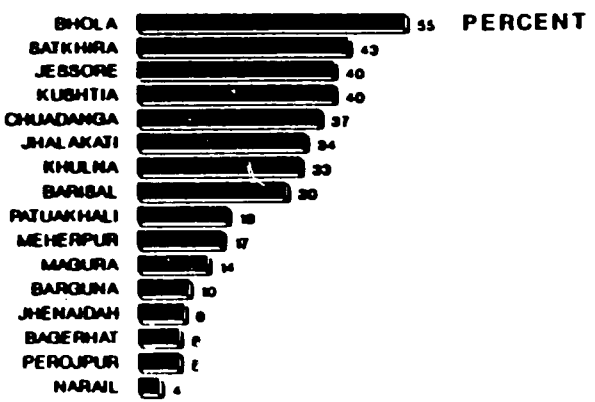


COMPARISION OF DISTRICTS BY DIVISION (JULY 1988 - JUNE 1989)

CHITTAGONG DIVISION (MEASLES)

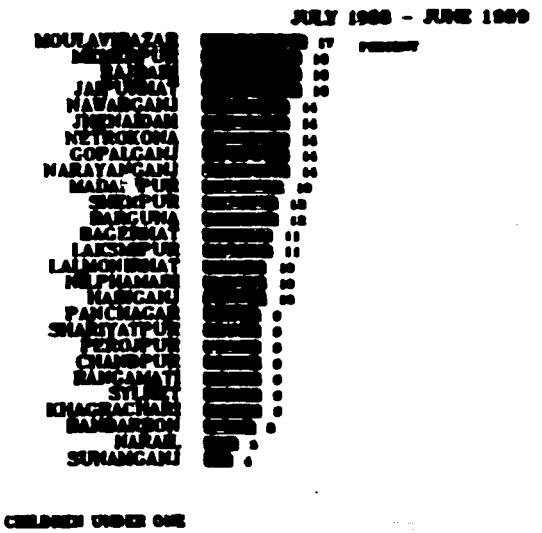


KHULNA DIVISION (MEASLES)



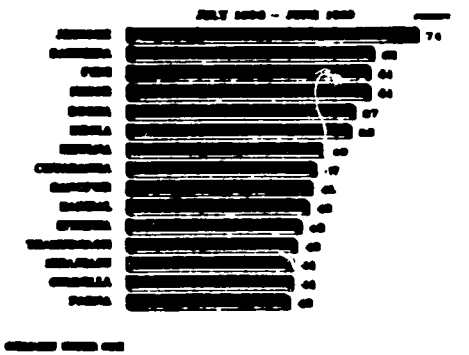
CHILDREN UNDER 1 YEAR

DISTRICTS WITH LESS THAN 20% COVERAGE FOR DPT/OPV-3

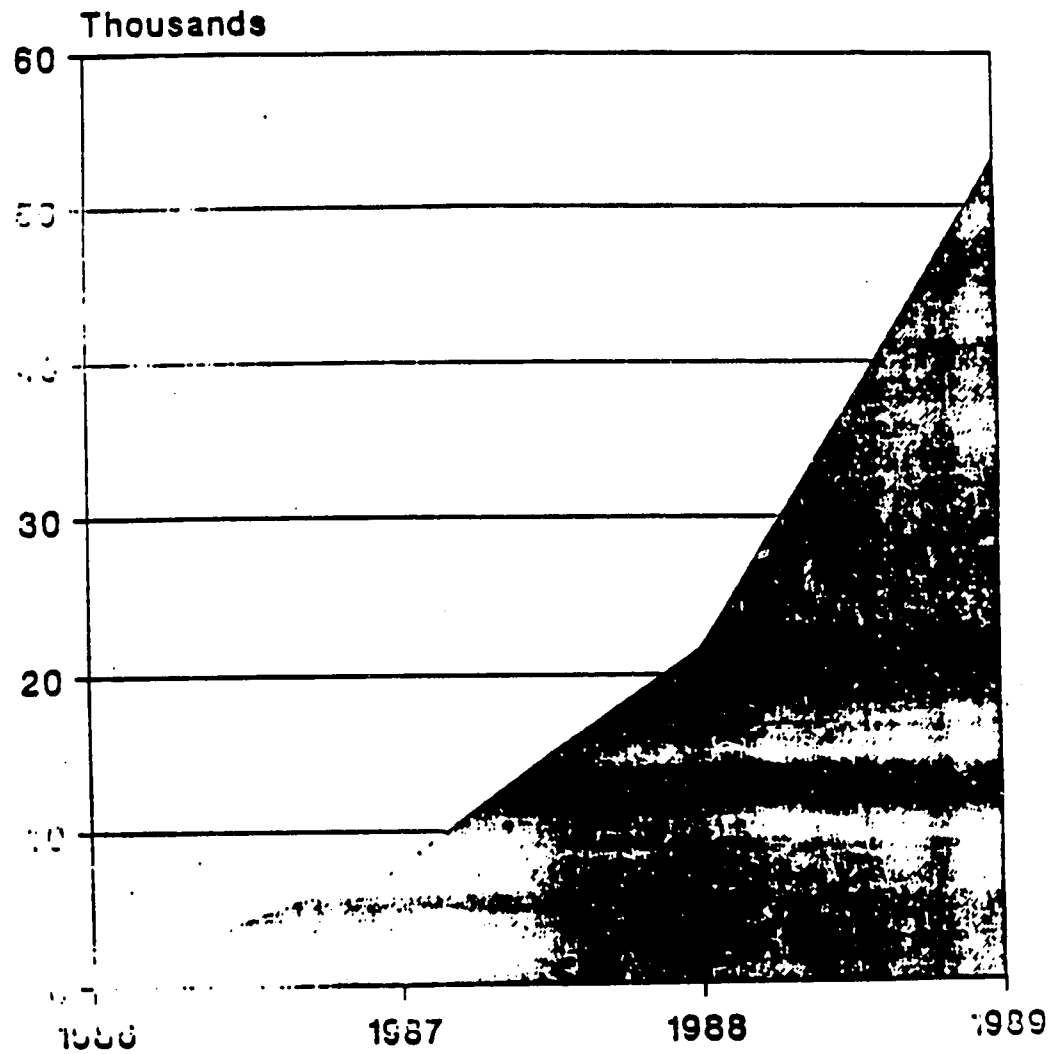


DISTRICTS WITH DPT-3 COVERAGE BETWEEN 20% AND 39%

DISTRICTS WITH DPT/OPV-3 COVERAGE 40% OR ABOVE



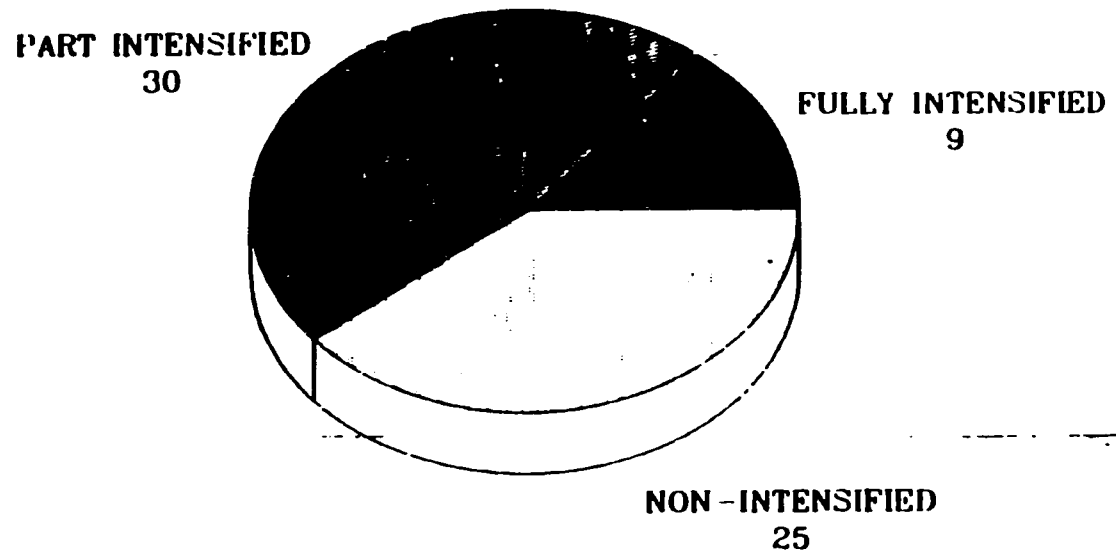
HEALTH & FAMILY PLANNING STAFF TRAINED 1986 - 1989 EPI BANGLADESH



CUMULATIVE TOTAL = 53,121

STATUS OF EPI IMPLEMENTATION IN BANGLADESH

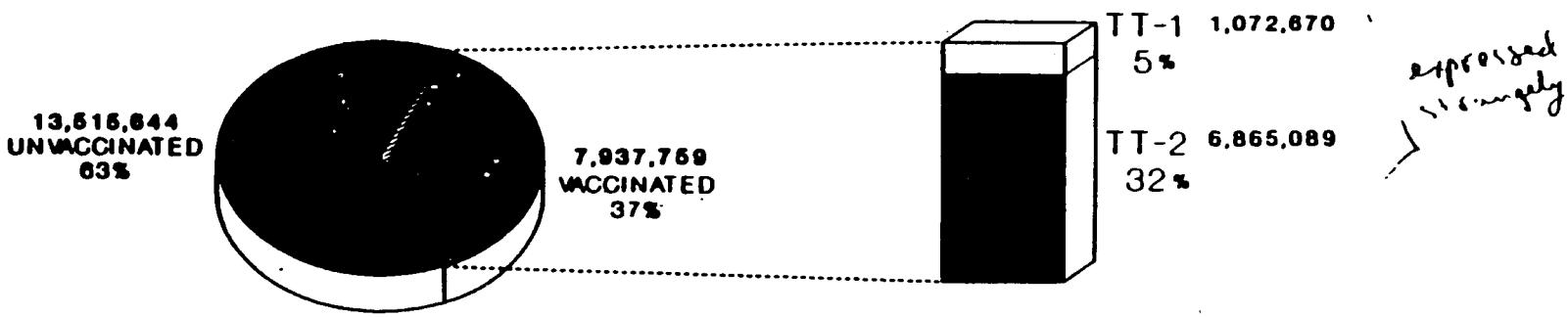
JULY 1989



TOTAL 64 DISTRICTS

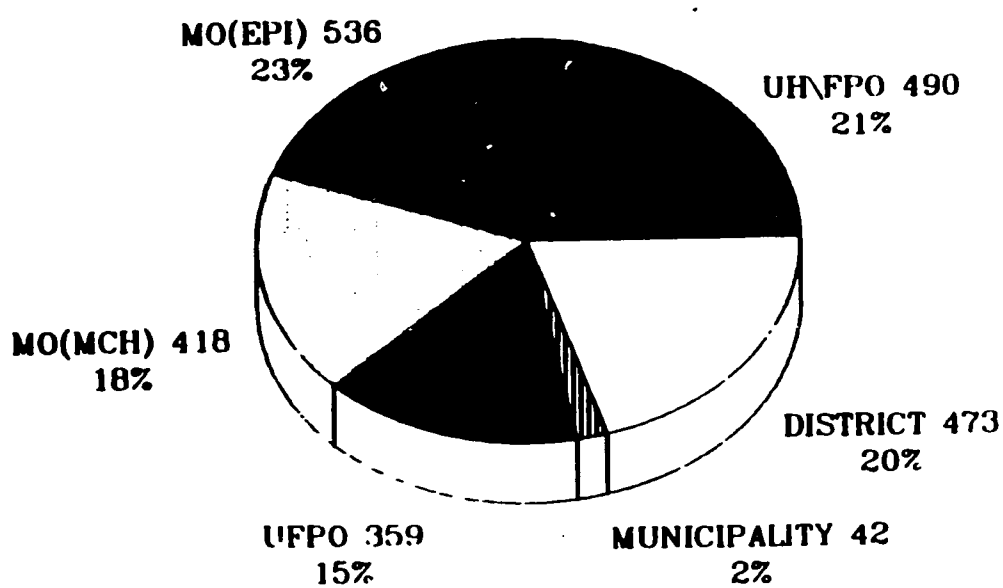
28

STATUS OF WOMEN AGE 15 - 45
FOR TT VACCINATION
AS OF JUNE 1989

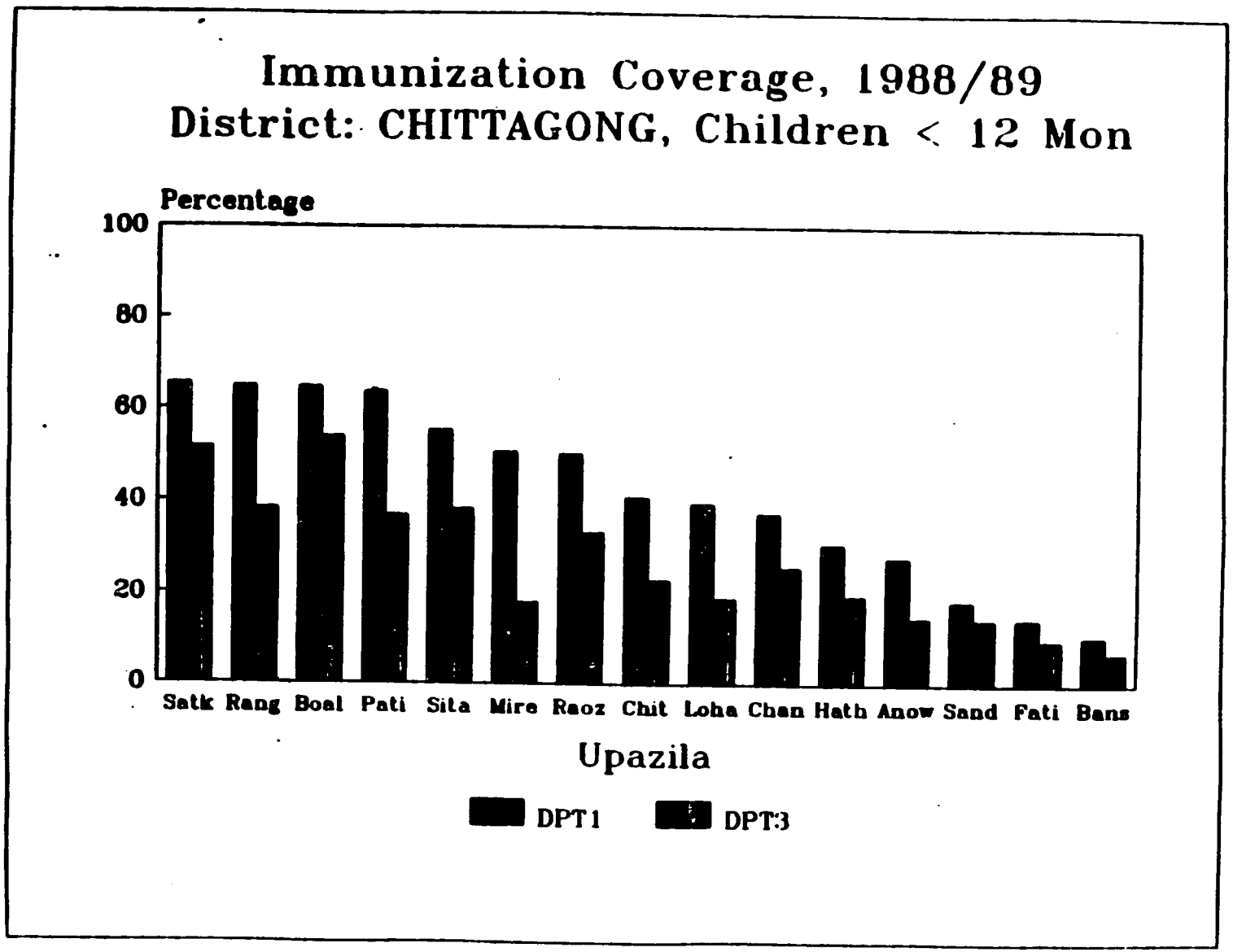


BANGLADESH

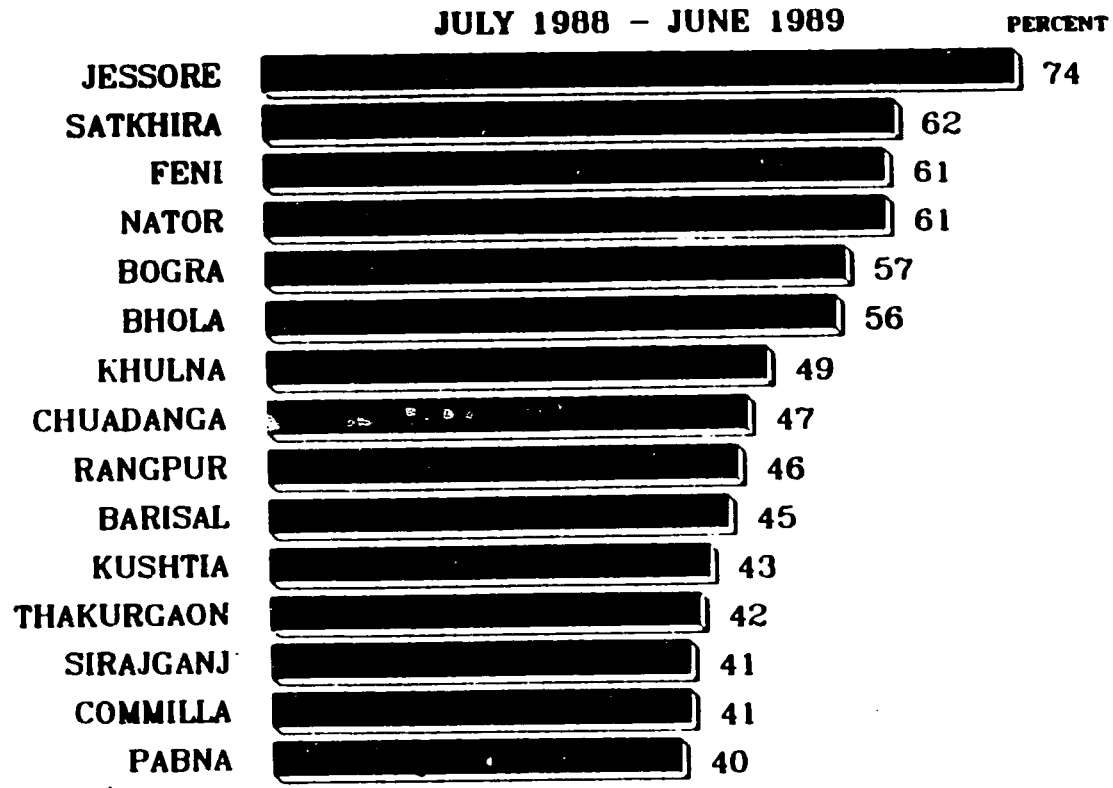
CATEGORIES OF THE MIDLEVEL
MANAGERS TRAINED IN EPI (1986 -89)



TOTAL 2318


Immunization Coverage, 1988/89
District: CHITTAGONG, Children < 12 Mon
Percentage
100
80
60
40
20
0
Satk Rang Boal Pati Sita Mire Raoz Chit Loha Chan Hath Anow Sand Fati Bans
Upazila
DPT1
DPT3

DISTRICTS WITH DPT/OPV-3 COVERAGE 40% OR ABOVE



CHILDREN UNDER ONE

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ANNEX 3

CEIS

Currently the system is being used for immunization coverage only. The training and funding components are not yet utilized. No doubt, the system is quite sophisticated one and has gained lot of interest among the users. However, we have experienced some problems with the installation of the software. Even though we could overcome these problems, I would like to point some of the areas that needs improvement for easier installation of the package.

1. We have experienced problem with the locations which has different location code but the same name. For example, one district has several sub-districts (upazilas). Each upazila has a location code assigned to it. However, when two different district has two upazilas with same name, the system would either manipulate some erroneous report or wouldn't allow data entry/update for these two upazilas.

2. For some reason databases have blank records for all the years to come. For example the COVERAGE.DBF itself has about 40,000 records out of which 2/5th is only used so far. Therefore, the blank records are occupying considerable amount of disk space. Not only that, all related index files are also taking up disk space for all the blank records. If the package could be designed such a way that only the reports that are coming in will stay in the database, then we could save huge disk space. It will not only save the disk space but will speed up the system as well.

3. The system does not have any option for backing up data not needed. For example the database is currently holding data for 1987. If the system had option for backing these data in floppies, and load these back to the system only when needed, we could free up lot of disk space . This will also help in speeding up the system.

4. The system does not have any option for retrieving information for the Municipalities as a group. Each municipality has been assigned with a code like upazilas. We can retrieve summary report for the whole Bangladesh but there is no option for retrieving summary report for munacipilities only. This is very important for the REACH project which is working in the municipal (urban/sub-urban) areas only.

5. Currently no documentation exists for the CEIS system. Therefore, it is very difficult to find out which database has which index files and what are the index keys for creating these indexes. This is needed for fixing the database and related indexes in case the index files get damaged.

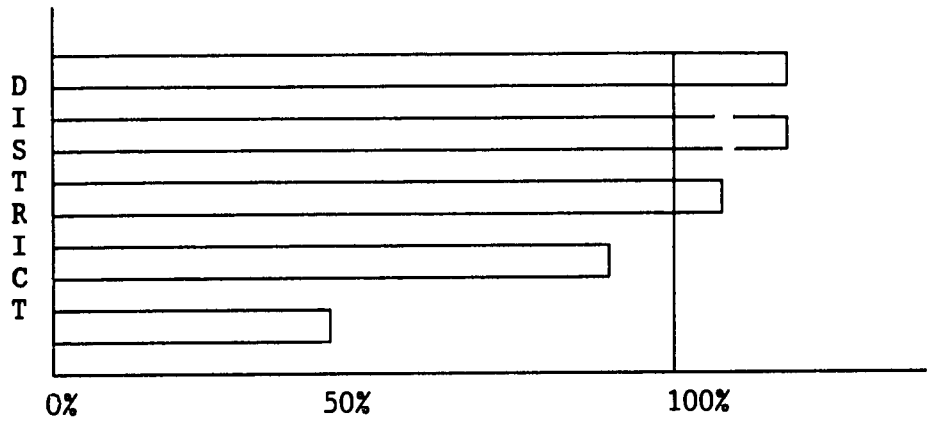
6. We also would like to suggest that whenever modifications are done by consultants from abroad, copy of source code be left behind so that if slight modifications needs to be done to meet the local need can be fulfilled with the help of local experts.

7. Furthermore, if EPI logistics can be integrated into the system, it can serve as an useful tool for the EPI management.

Milton D'Silva
Joint Admn. & Fin. Officer
JSI/Bangladesh

ANNEX 4

Measles Immunization Screening Efficiency* Among Children 12-23 months old, by District 1988-89 (hypothetical data)

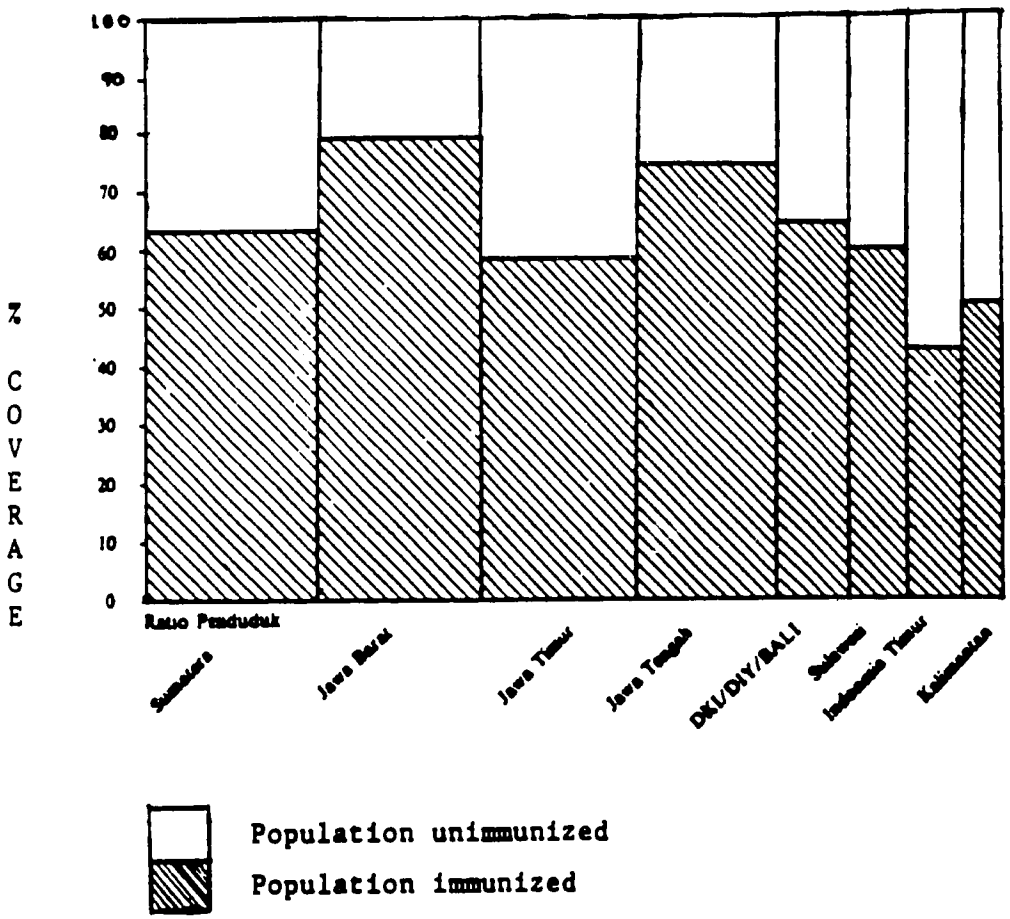


*Calculated as $\frac{\text{No. of measles Immun. in children 12-23 months old}}{\text{No. of DPT 1 Immun. in children 12-23 months old}} \times 100$

assuming each child $\geq$ 12 months old who receives DPT 1 immunization also requires measles immunization on the same visit. The ratio should always be greater than 100%, since many children receiving DPT $_2$ or DPT $_3$ also require measles.

ANNEX 5

Percent Vaccination Coverage* of Infants
with Polio 3 by Province Indonesia, 1987



*NOTE: Width of columns is proportionate to population size. White (unshaded) areas represent the size of the province's unimmunized infant population.

ANNEX 6

Drop-outs

High drop-outs remain a significant problem in the Region. To accelerate their programs each country needs to critically examine the reasons for failure to fully immunize a child. Immunization coverage surveys which investigate reasons for failure to immunize or fully immunize a child are encouraged by EPI SEARO.

In Sri Lanka, for example, it was found that an immunization schedule with six months interval between second and third dose of DPT contributed to the high drop out rate for these antigens. Subsequent lowering of the interval to 6-8 weeks resulted in significantly lower drop-out rates.

Nepal has proposed a behavioral science approach study on EPI drop-outs which may identify some new innovative approach for EPI managers to reduce these problems.

Nevertheless, region-wide percentage of drop-ut rates of OPV1-3 had decreased from 28 in 1987 to 19 in 1988, and DPT1-3 from 22 in 1987 to 17 in 1988, as shown in Table 4 below.

TABLE 4:
PERCENTAGE OF EPI DROP-OUT RATES IN SEAR, 1985-1988*

	OPV 1-3				DPT 1-3			
	1985	1986	1987	1988	1985	1986	1987	1988
BAN	40	40	45	40	39	47	45	41
BHU	24	42	27	25	28	43	27	25
DPK	10	2	2	2	2	3	4	3
IND	19	22	29	19	30	31	20	17
INO	57	31	31	17	76	28	30	18
MAV	82	8	85	4	89	8	85	4
MOG	21	11	14	18	10	7	17	18
MYA	36	47	36	21	44	33	39	18
NEP	60	41	44	27	46	40	38	27
SRL	15	8	7	6	15	7	6	6
THA	19	16	13	7	20	15	13	8

NOTES: (*)= rounded percentage.
Based on yearly doses administered reported by countries.
UN denominators are used.
Source: Country Reports, Bali, June 1989.

SOURCE: An Overview of the EPI Progress in the South-East Asia Region, October 1989 (EPI/GAG/89/WP.6)