GAVI
THE GLOBAL ALLIANCE FOR VACCINES & IMMUNIZATION

Partnering with The Vaccine Fund

# Progress Report

to the
Global Alliance for Vaccines and Immunization (GAVI)
and
The Vaccine Fund

by the Government of

## The People's Republic of Bangladesh

Date of submission: 30 September 2003
Reporting period: January-December 2002

*(Tick only one):*

Inception report
First annual progress report .....√
Second annual progress report
Third annual progress report
Fourth annual progress report
Fifth annual progress report

*Text boxes supplied in this report are meant only to be used as guides. Please feel free to add text beyond the space provided.*
**Unless otherwise specified, documents may be shared with the GAVI partners and collaborators*

# Progress Report Form: Table of Contents

## 5. Checklist

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## 1. Report on progress made during the previous calendar year

**To be filled in by the country for each type of support received from GAVI/The Vaccine Fund.**

### *1.1 Immunization Services Support (ISS)*

#### 1.1.1 Management of ISS Funds

→ *Please describe the mechanism for management of ISS funds, including the role of the Inter-Agency Co-ordinating Committee (ICC). Please report on any problems that have been encountered involving the use of those funds, such as delay in availability for programme use.*

*The members of the ICC agreed that there should be a separate financial management system to manage the GAVI/The Vaccine Fund. Accordingly ICC created a financial sub committee to select a firm for developing the financial and management system for GAVI/VF. A. Qasem and Co. a private accounting firm awarded to develop the financial management system for GAVI/VF. They have started their assignment from March 2003. By this time the firm provided a written evaluation and assessment of the adequacy of the current management systems used by GoB and recommendations for their improvement to provide simple, flexible, transparent and auditable management system. Recently the firm developed 4 manuals on the followings-*

a. *Procurement manual*
b. *Asset & Inventory Control manual*
c. *Finance manual*
d. *Administrative and Personnel manual*

*These manuals were shared with the members of the financial management sub committee for their review and recommendations. After getting*

*the suggestions from the members the firm will finalize the manuals.*

*The fund received for both ISS and introduction of new vaccine was kept in a National Bank in a foreign currency account. The name of the account is "Global Alliance for Vaccines and Immunization". The Joint Secretary (PH & WHO), MOH&FW and the Program Manager, Child Health and Limited Curative Care, DGHS are the joint signatories authorized by ICC for managing the cash flow. Till now there was no problem faced in program implementation of using GAVI fund. The fund utilization in the year 2002 is minimum, as because most of the planned activities are being implemented in 2003.*

*The budget break up of the GAVI/VF shared with the ICC members for their review and approval. EPI HQ is making all expenditures following that approved budget. The technical sub committee proposes for the changes of the approved budget. Further change of the budget or planned activity also needs approval from the ICC.*

*Based on experience and program needs & priorities a revised and detailed budget of GAVI/VF has been prepared and shared with the members of the ICC. Hopefully in the next meeting the revised budget will be approved by the ICC.*

### 1.1.2 Use of Immunization Services Support

→ *In the <u>past year</u>, the following major areas of activities have been funded with the GAVI/Vaccine Fund contribution.*

**Funds received during the reporting year (2002): US $ 1,785,000**

**Remaining funds (carry over) from the previous year (2002): Nil**

**Table 1: Use of funds during <u>reported</u> calendar year (Jan-Dec 2002): 8,089**

| Area of Immunization Services Support | Total amount in US $ | Amount of funds | | | |
|---|---|---|---|---|---|
| | | PUBLIC SECTOR | | | PRIVATE SECTOR & Other |
| | | Central | Region/State/Province | District | |
| Vaccines | - | | | | |
| Injection supplies | - | | | | |
| Personnel | - | | | | |
| Transportation | - | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Maintenance and overheads | - | | | | |
| Training | - | | | | |
| IEC / social mobilization | - | | | | |
| Outreach | - | | | | |
| Supervision | - | | | | |
| Monitoring and evaluation | - | | | | |
| Epidemiological surveillance | - | | | | |
| Vehicles | - | | | | |
| Cold chain equipment | - | | | | |
| Other ……. *(Specify)*<br>*Consulting firm*<br>*Different Meeting* | <br>7357<br>732 | <br>100%<br>100% | | | |
| **Total:** | 8,089 | 100% | | | |
| **Remaining funds for next year:** | 1,776,911 | | | | |

***If no information is available because of block grants, please indicate under 'other'.***

***Please attach the minutes of the ICC meeting(s) when the allocation of funds was discussed (Annex.1 and 2)***.

→ *Please report on major activities conducted to strengthen immunization, as well as, problems encountered in relation to your multi-year plan.*

*To strengthen routine immunization coverage EPI HQ planned to organize management and micro-planning workshop in all the 64 Districts. This workshop started in the year 2002 and will be completed by October 2003. UNICEF finances these workshops. The managers from District, Upazila, City Corporation and Municipalities participate the workshop where EPI HQ personnel act as the resource person. In these workshops the managers identify their local problems for low performance and probable strategy to overcome those problems. The strategy to gear up EPI services also includes the financial support from National level. As agreed by the ICC the financial support will be covered from the envelope budget, which is budgeted in the GAVI/VF. The management and micro- planning workshop is planned for two days and on a regional basis to make the training a residential one. The guidelines and forms prepared for this workshops were field tested several times before finalization.*

*The other most important activity planned to boost up vaccination coverage is the EPI refresher training for the managers, supervisors and field*

*workers of District, Upazila, City Corporation and Municipality. The refresher training is planned for the whole country and UNICEF will provide financial support for forty-three Districts. The financial support for rest of the areas will be covered from the GAVI/VF. The TOT for EPI refresher training is planned for four days and on a regional basis. This is also a residential training. The training for the field workers and supervisors is for three days and will be organized at Upazila level.*

*The recruitment sub committee completed the selection of District Immunization Medical Officers (DIMOs). Out of twenty-five positions twenty-three positions were finalized with their place of posting. Proposal for the other two candidates was sent to the MOH&FW for approval. Nine have already joined in September 2003. The rest fourteen will join in October 2003. The DIMOs will be posted in the low performing areas. DIMOs will assist the local health authority in planning, managing, implementing and evaluating the total EPI program in his/her assigned area. The low performing areas were selected based on the number of missed children from DPT-3 rather than based on percentage of coverage. From the Coverage Evaluation Survey2002 it was found that around 561,446 children were missed from DPT-3 and the areas where DIMOs will be posted will cover 404,094 children (72% of the total dropped children).*

*A comprehensive training for six days was conducted for the DIMOs. The training includes present status of routine vaccination coverage, social mobilization and communication, adverse event following immunization, different types of record keeping and reporting forms, data quality audit, management & micro planning, hard to reach and high risk approach, disease surveillance, supervision and monitoring, cold chain, coverage evaluation survey, overview of GAVI and one day field visit. For monitoring the DIMOs activities a proposal will be submitted in the next ICC for a national coordinator and two other support staff at central level. The DIMOs will be provided a pick up van with driver, a laptop computer with printer, an OHP and a mobile phone.*

*Government of Bangladesh received the approval of injection safety support. Of this support national EPI will get AD syringe and safety box for all antigen used in vaccination program. Budget provision was kept for organizing a one-day training on Injection Safety. for the health personnel at different level. The WHO surveillance medical officers (SMOs) and the DIMOs will act as a resource person. The SMOs and DIMOs will receive TOT at national level. AEFI will also be included in that training.*

*Provision of envelope budget was kept for each Upazila, Municipality and City Corporation to cover additional financial support for increasing the vaccination coverage. This fund will be disbursed on need basis and will be approved by the ICC technical sub committee.*

*According to the recommendation made by the DQA team the record and report forms have been revised and implemented in Hep-B phase1 areas. National EPI has planned to use this revised record keeping and reporting forms all over the country from the year 2004. Printing cost is budgeted in the ISS sub account.*

*The summary sheet of the draft budget is enclosed herewith so that the GAVI board can easily identify the areas where and how much fund will be used for coming years (Annex.3).*

### 1.1.3 Immunization Data Quality Audit (DQA) (*If it has been implemented in your country)*

→ *Has a plan of action to improve the reporting system based on the recommendations from the DQA been prepared?*
*If yes, please attach the plan (Annex 4).*

*YES* √ *NO* ☐

→ *If yes, please attach the plan and report on the degree of its implementation.*

*The DQA was held from 29 October to 14 November 2002 by two external and two internal auditors and supported by WHO and UNICEF personnel. The DQA in Bangladesh verified overall quality of vaccination data but there are areas for improvement as indicated in the Quality Index. The findings of the DQA were shared in the ICC and the recommendations made by the DQA team were also discussed. The ICC authorized the technical sub committee to work on the recommendations made by the DQA team and the way to incorporate those recommendations in the record keeping and reporting forms.*

*Based on the recommendations made by the DQA team, the ICC technical sub committee already revised the child card, child registration book, tally book and monthly report book. These revised record and report forms were introduced in the Hep-B phase-1 areas. By the end of this year EPI HQ will review those forms with the users and will make necessary changes if needed. The final record keeping and reporting forms will be introduced all over the country in the year 2004. As suggested by the technical sub committee the Program Manager, CH&LCC already issued a letter to the field containing the guideline on improving the record keeping and reporting system.*

*A plan of action has been prepared based on the recommendation from the DQA but this is still in a draft form. The national EPI is planning to finalize the plan of action after receiving feed back from the official DQA in 2003. After finalization, the POA will be shared with ICC. Minutes of the ICC is attached where the DQA was discussed* ***(Annex.5).***

*In each record and report book instructions have been attached on how to fill a book, tasks for the workers during vaccination session, messages for the parents to be shared during IPC etc. These instructions were reviewed and necessary changes have been made in accordance*

*with the recommendation of the DQA team. In the monthly reporting book major changes were done to improve the quality of recording system. In the newly revised reporting book clear instructions were given how to prepare monthly report at different level and who will be responsible for that. In addition to that the flow of report is also included in the monthly reporting book.*

***Please attach the minutes of the ICC meeting where the plan of action for the DQA was discussed and endorsed by the ICC.***

→ *Please list studies conducted regarding EPI issues during the last year (for example, coverage surveys, cold chain assessment, EPI review).*

*A 30 cluster survey was done in each of the 64 Districts & 4 City Corporations (CCs) from March 23-April 2, 2002 and the results have been finalised. This survey is important not only to get an objective measurement of routine EPI coverage for children and women by district but also to assess various indicators of EPI quality, reasons for drop-out and left-out children and women, knowledge and attitudes of clients, and frequency of post vaccination abscesses by district. These results will be used to focus GAVI-VF funded initiatives to strengthen routine EPI services in the low performing areas and to target interventions appropriately. The CES findings have been shared during the Management and Micro-planning workshop of the specific area. . This will help the local health officials in formulating the strategies to reduce the gap between the coverage and the speculated target during management and micro planning workshop. This is the first time that Government of Bangladesh conducted separate CES for each district. Previously it was done on Divisional basis.*

*UNICEF is planning to conduct a comprehensive review of cold chain status in 2003.*

*In each year Government of Bangladesh prepares a work plan for the next year based on the experience of the preceding year. In 2002 the work plan for 2003 was also prepared to implement the activities for achieving the immunization goals and program priorities.*

## *1.2 GAVI/Vaccine Fund New & Under-used Vaccines Support*

### 1.2.1 Receipt of new and under-used vaccines during the previous calendar year

→ *Please report on receipt of vaccines provided by GAVI/VF, including problems encountered.*

*The number of total doses of Hep-B vaccine received by the Government of Bangladesh in 2002 is 2,682,000 in different shipments. In the letter from the GAVI secretariat dated 22 April 2003 it was mentioned that considering the revised targets, wastage rate and the delay of vaccine introduction Bangladesh will not require any vaccine for 2003. Besides that it was mentioned that an additional 648,880 doses will be deducted*

*from the 2004 request and it seems justified for Bangladesh.*

### 1.2.2 Major activities

→ *Please outline major activities that have been or will be undertaken, in relation to, introduction, phasing-in, service strengthening, etc. and report on problems encountered.*

*It was planned to collect the important baseline data prior to the introduction of Hep-B vaccine for clear understanding of current cold chain quality and needs, logistics status, storage facility, staff status, record and reporting system, actual target population and indicators of routine EPI service quality etc. from the Upazila, District, Municipality and City Corporation. For this, a twelve page EPI evaluation checklist has been prepared. Medical Officers from EPI HQ were assigned to collect the baseline information.*

*It is also planned to organize an advocacy meeting in each Upazila, District, Municipality and City Corporation before introduction of Hep-B vaccination program. An advocacy kit will be prepared..*

*Hep-B vaccine will be introduced in the routine EPI program and along with DPT doses, still then it is required to train all related staff on Hepatitis-B. Keeping this in mind National EPI has developed lesson plans for organizing training of the trainers (TOT) on Hep-B for the District, Upazila, Municipality and City Corporation managers. After receiving the TOT the trainers will then organize training for the supervisors and field workers of his/her assigned area. The training of the trainers is scheduled for two days and for the supervisors and field workers for one day. A field guide was prepared for the supervisors and field workers in "Bangla" to be used as a reference manual.*

*The Government of Bangladesh finalized the expansion plan for Hep-B vaccine. It was agreed upon by the ICC that 50% of the country will be covered by the year 2004 and rest 50% by the year 2005. In 1$^{st}$ phase Hep-B vaccine was introduced in 7 districts from April 2003 and 1 city corporation from August 2003. In the 2$^{nd}$ quarter of 2004 additional 3 City Corporations and 12 districts will be covered. In the 3$^{rd}$ quarter of 2004 2 City Corporations and 13 districts will be covered under Hep-B vaccination program. In the 1$^{st}$ quarter of 2005 a total number of 16 Districts will be included for Hep-B expansion. The rest 16 districts will be covered by the 2$^{nd}$ quarter of 2005.*

### 1.2.3 Use of GAVI/The Vaccine Fund financial support (US$100,000) for the introduction of the new vaccine

→ *Please report on the proportion of 100,000 US$ used, activities undertaken, and problems encountered such as delay in availability of funds for programme use.*

*Government of Bangladesh received US$ 100,000 in November 2002. Till now US$ 66,447 (66%) already has been spent. Out of this*

*expenditure 90% was spent for Hep-B training, 8% for IEC purpose and 2% for supervision.*
*Fund received for the introduction of the new vaccine was mainly planned for Hep-B training, data collection from the field prior introduction of Hep-B vaccine, advocacy and planning meeting at different level and supervision of Hep-B areas.*

*The amount approved from GAVI/VF for introduction of new vaccine is not sufficient to cover the above-mentioned activities. An amount of US $ 470,994 will be required to complete only the Hep-B training program. For that reason ICC decided to cover the additional expenses from the ISS sub account.*

## *1.3 Injection Safety*

### 1.3.1 Receipt of injection safety support

→ *Please report on receipt of injection safety support provided by GAVI/VF, including problems encountered*

*Bangladesh received the approval of injection safety support from the GAVI secretariat for the year 2004-6.*

*Table 4 (baseline and annual targets) attached with the letter dated 14 July 2003 as appendix C has been reviewed and some modification was done. The revised table is attached as* **Annex.6.** *According to this revised table the supplies for injection safety have been revised. The total number of approved AD syringe for the year 2004 (as indicated in the letter dated 12 August 2003) for BCG is 5,490,100 and it is same as the previous requirement. But the approved number of AD syringe for other vaccines is 29,287,200, which became 31,335,842 after recalculation and change of target children and considering the number of sessions. The approved number of reconstitution syringe for BCG is 549,100 but the revised requirement is 1,793,991. The approved number of reconstitution syringe for Measles is 718,800 but the revised requirement is 1,793,991. For the reconstitution syringe the number of sessions were considered instead of number of doses and the reconstitution syringe will be needed at least one for BCG and one for Measles per session (2 reconstitution syringe per session).*

*Since the intensification of routine immunization in the year 1989 the operational strategy remains same. In the strategy there are 8 outreach centres in each ward, which operates vaccination session once in a month. Each outreach centre has a catchments population of around 1000. In Bangladesh there are approximately 13,500 rural and 527 urban wards. Based on this, the total number of monthly session is around 134,684 of which 115,576 is outreach and 19,108 is fixed sessions.*

*The number of safety box was calculated according to the number of syringes. The approved number of safety box is 400,100 but based on the above calculation it becomes 448,594 for the year 2004.*

### 1.3.2 Progress of transition plan for safe injections and safe management of sharps waste.

→ *Please report on the progress based on the indicators chosen by your country in the proposal for GAVI/VF support.*

| Indicators | Targets | Achievements | Constraints | Updated targets |
|---|---|---|---|---|
| | | | | |

### 1.3.3 Statement on use of GAVI/The Vaccine Fund injection safety support (if received in the form of a cash contribution)

→ *The following major areas of activities have been funded (specify the amount) with the GAVI/The Vaccine Fund injection safety support in the past year:*

***The Government of Bangladesh received the injection safety support in the form of kind.***

## 2. Financial sustainability

| | |
|---|---|
| Inception Report: | Outline timetable and major steps taken towards improving financial sustainability and the development of a financial sustainability plan. |
| First Annual Report: | Report progress on steps taken and update timetable for improving financial sustainability Submit completed financial sustainability plan by given deadline and describe assistance that will be needed for financial sustainability planning. |
| Second Annual Progress Report: | Append financial sustainability action plan and describe any progress to date. Describe indicators selected for monitoring financial sustainability plans and include baseline and current values for each indicator. |
| Subsequent reports: | Summarize progress made against the FSP strategic plan. Describe successes, difficulties and how challenges encountered were addressed. Include future planned action steps, their timing and persons responsible.<br>Report current values for indicators selected to monitor progress towards financial sustainability. Describe the reasons for the evolution of these indicators in relation to the baseline and previous year values. |

Update the estimates on program costs and financing with a focus on the last year, the current year and the next 3 years. For the last year and current year, update the estimates of expected funding provided in the FSP tables with actual funds received since. For the next 3 years, update any changes in the costing and financing projections. The updates should be reported using the same standardized tables and tools used for the development of the FSP (latest versions available on http://www.gaviftf.org under FSP guidelines and annexes).
Highlight assistance needed from partners at local, regional and/or global level

*Bangladesh is in process of preparing the financial sustainability plan. The plan will be submitted by November 2003. A local consultant is assigned to coordinate the draft financial sustainability plan. The draft report will be shared in mid October with SEARO and GAVI Secretariat for their review.*

## 3. Request for new and under-used vaccines for year January-December 2004 *(indicate forthcoming year)*

*Section 3 is related to the request for new and under used vaccines and injection safety for the* ***forthcoming year****.*

### 3.1. Up-dated immunization targets

→ Confirm/update basic data (= surviving infants, DTP3 targets, New vaccination targets) approved with country application: revised Table 4 of approved application form.

DTP3 reported figures are expected to be consistent with those reported in the WHO/UNICEF Joint Reporting Forms. Any changes and/or discrepancies **MUST** be justified in the space provided (page 10). Targets for future years **MUST** be provided.

***Revised Table-4 of approved application form is attached as Annex.6***

**Table 2: Baseline and annual targets**

| Number of | Baseline and targets | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **2000** | **2001** | **2002** | **2003** | **2004** | **2005** | **2006** | **2007** |
| **DENOMINATORS** | | | | | | | | |
| Births | 3,846,341 | 3,903,266 | 3,961,034 | 4,019,658 | 4,079,149 | 4,139,520 | 4,200,785 | 4,262,957 |
| Infants' deaths | 255,012 | 258,787 | 262,617 | 266,503 | 270,448 | 274,450 | 278,512 | 282,634 |
| Neonatal Death | - | 163,937 | 166,363 | 168,826 | 171,324 | 173,860 | 176,433 | 179,044 |
| Surviving infants | 3,591,328 | 3,644,480 | 3,698,418 | 3,753,154 | 3,808,701 | 3,865,070 | 3,922,273 | 3,980,323 |
| Surviving Neonates | - | 3,739,329 | 3,794,671 | 3,850,832 | 3,907,824 | 3,965,660 | 4,024,352 | 4,083,912 |
| **Infants vaccinated with DTP3 *** | | | | | | | | |
| Infants vaccinated with DTP3: administrative figure reported in the WHO/UNICEF Joint Reporting Form | 2,884,772 | 3,097,460 | 3,263,819 | 3,080,666 | 3,321,651 | 3,569,094 | 3,621,917 | 3,675,521 |
| **NEW VACCINES** | | | | | | | | |
| Infants vaccinated with Hep-B * (use one row per new vaccine) | - | - | - | 307,788 | 1,273,788 | 3,370,045 | 3,621,917 | 3,675,521 |
| Wastage rate of ** ……. *( new vaccine)* | - | - | - | 30% | 30% | 25%-30% | 20% | 15% |
| **INJECTION SAFETY** | | | | | | | | |
| Pregnant women vaccinated with TT | N/A | N/A | N/A | 4,622,606 | 4,691,021 | 4,760,448 | 4,830,903 | 4,902,400 |
| Infants vaccinated with BCG | 2,973,202 | 3,237,582 | 3,319,837 | 3,858,871 | 3,956,774 | 4,056,730 | 4,158,777 | 4,220,327 |
| Infants vaccinated with Measles | 2,798,093 | 3,017,447 | 3,200,571 | 3,002,524 | 3,237,396 | 3,478,563 | 3,530,046 | 3,582,290 |

***In Bangladesh according to the routine immunization schedule vaccination with DPT, Hep-B and OPV starts at the age of 6 weeks. Therefore the surviving neonates were considered as denominator for determining the target children instead of surviving infants except Measles vaccine. In case of BCG total number of Births were considered as denominator.***

* Indicate actual number of children vaccinated in past years and updated targets
** Indicate actual wastage rate obtained in past years

→ *Please provide justification on changes to baseline, targets, wastage rate, vaccine presentation, etc. from the previously approved plan, and on reported figures, which differ from those reported in the WHO/UNICEF Joint Reporting Form in the space, provided below.*

*In Bangladesh according to the EPI schedule vaccination starts at the age of 6 weeks. If surviving infants are considered as target then there will be shortage of vaccine/logistics if the infants die after receiving vaccine in the scheduled time period. For this reason the numbers of surviving neonates were considered for calculating the vaccine and logistics. The target for vaccination coverage is set at 80% in the year 2003, 85% in the year 2004 and 90% in the year 2005 and onwards. The target for BCG is set 97% in 2004, 98% in 2005 and 99% in 2006 and onwards.*

*In table-2, the numbers of DTP-3 children is consistent with WHO/UNICEF joint reporting form for the year 2000-2002 though it is different from the inception report. It should be noted that routine administrative reported coverage in Bangladesh includes valid and invalid doses and regardless of age. Bangladesh is now taking steps to improve routine administrative reporting to distinguish under and above one year of age children. For this, it is not possible at present to do so from the administrative records. But we can determine the children with valid doses vaccinated by one year from the National Coverage Evaluation Survey (NCES) with the help of the percentage of children vaccinated by one year. In the inception report calculation was made on this.*

*A vaccination dose is considered invalid when the first dose of DTP is given before 6 weeks, interval between DTP 2$^{nd}$ and 3$^{rd}$ doses is less than 4 weeks or measles vaccination is given before 270 days. According to EPI schedule of Bangladesh a child should complete the vaccination series by one year of age. But if a child starts vaccination with in one year of age and completes the series by 23 months in that case this is also considered as valid but not valid within one year.*

*In the year 2003 Hep-B vaccine has been introduced in 7 Districts and 1 City Corporation (around 8%of the total national population) and the wastage is 30% as approved. In 2004 Hep-B vaccine will be introduced in 25 districts and 5 City Corporations (around 42% of the total national population) and the wastage is considered 30%, as these areas are the first year of introduction. In 2005, Hep-B vaccine will be introduced in 32 districts and for these districts wastage rate is calculated as 30% (first year of introduction) and for the previously introduced areas the wastage rate is considered 25%.*

*In Bangladesh according to EPI schedule women of 15-49 years should get 5 doses of TT. From the current reporting form it is not possible to*

*separate TT2+ coverage for only pregnant women. In the WHO/UNICEF joint reporting form the number mentioned for 2000 and 2001 are the TT2+ coverage for all women (15-49 years of age). As GAVI will provide support only for pregnant women for 2 doses so 100% of pregnant women has been considered as target to manage the shortfall of injection safety supply to some extent.*

3.2 Confirmed/Revised request for new vaccine *(to be shared with UNICEF Supply Division)* **for the year 2004** *(indicate forthcoming year)*

→ *Please indicate that UNICEF Supply Division has assured the availability of the new quantity of supply according to new changes.*

*Request for Hep-B vaccine, AD syringe and Safety box has already sent to the supply division of UNICEF as per approved quantity by the GAVI board for vaccine and injection safety support. But the revised one yet to be shared with them.*

*The GAVI board approved total number of 8,722,331 doses of Hep-B vaccine for the year 2004. Considering the revised targets, expansion plan, wastage rate and the number of sessions it becomes 7,214,104 doses for the year 2004. For AD syringe the approved number is 8,065,928 but considering the expansion plan it became 5,306,423. The number of safety box approved is 89,532 but in the new calculation it became 58,901.*

**Table 3: Estimated number of doses of Hepatitis-B vaccine *(specify for one presentation only):*** *(Please repeat this table for any other vaccine presentation requested from GAVI/The Vaccine Fund*

| | | Formula | For year 2004 |
|---|---|---|---|
| **A** | **Number of children to receive new vaccine** | | 1,273,789 |
| **B** | **Percentage of vaccines requested from The Vaccine Fund taking into consideration the Financial Sustainability Plan** | *%* | 100 |
| **C** | **Number of doses per child** | | 3 |
| **D** | **Number of doses** | *A x B/100 x C* | 3,821,367 |
| **E** | **Estimated wastage factor** | *(see list in table 3)* | 1.43 |
| **F** | **Number of doses ( incl. wastage)** | *A x C x E x B/100* | 5,464,555 |
| **G** | **Vaccines buffer stock** | *F x 0.25* | 1,366,139 |
| **H** | **Anticipated vaccines in stock at start of year ….** | | 406,944 |
| **I** | **Total vaccine doses requested**<br>**Based on number of sessions** | *F + G – H* | 6,423,749<br>7,214,104 |
| **J** | **Number of doses per vial** | | 10 |
| **K** | **Number of AD syringes (+ 10% wastage)** | *(D + G – H) x 1.11* | 5,306,423 |
| **L** | **Reconstitution syringes (+ 10% wastage)** | *I / J x 1.11* | 0 |
| **M** | **Total of safety boxes (+ 10% of extra need)** | *(K + L) / 100 x 1.11* | 58901 |

## Remarks

- **Phasing:** Please adjust estimates of target number of children to receive new vaccines, if a phased introduction is intended. If targets for hep B3 and Hib3 differ from DTP3, explanation of the difference should be provided
- **Wastage of vaccines:** The country would aim for a maximum wastage rate of 25% for the first year with a plan to gradually reduce it to 15% by the third year. No maximum limits have been set for yellow fever vaccine in multi-dose vials.
- **Buffer stock:** The buffer stock for vaccines and AD syringes is set at 25%. This is added to the first stock of doses required to introduce the vaccination in any given geographic area. Write zero under other years. In case of a phased introduction with the buffer stock spread over several years, the formula should read: [F – number of doses (incl. wastage) received in previous year] * 0.25.
- **Anticipated vaccines in stock at start of year 2003:** It is calculated by deducting the buffer stock received in previous years from the current balance of vaccines in stock.
- **AD syringes:** A wastage factor of 1.11 is applied to the total number of vaccine doses requested from the Fund, excluding the wastage of vaccines.
- **Reconstitution syringes:** it applies only for lyophilized vaccines. Write zero for other vaccines.
- **Safety boxes:** A multiplying factor of 1.11 is applied to safety boxes to cater for areas where one box will be used for less than 100 syringes

***Phasing:*** *The Government of Bangladesh finalized the expansion plan for Hep-B vaccine. It was agreed upon by the ICC that 50% of the country will be covered by the year 2004. In the 2nd quarter of 2004 additional 3 City Corporations and 12 districts will be covered. In the 3rd quarter 2 City Corporation and 13 districts will be covered under Hep-B vaccination program. The number of children is calculated based on this expansion plan.*

***Wastage:*** *Bangladesh got approval of 30% wastage in the first year of introduction. In the year 2003 only 6 districts and 1 City Corporation introduced Hep-B vaccine, which is around 8% of the total national population. In the year 2004 around 50% of the total population will be covered. For why 30% wastage was considered for the year 2004 also.*

***On the basis of target children the requirement is 6,423,749 doses but considering the number of sessions the requirement is 7,214,104 doses and this is our actual requirement as because at least 1 vial is required for each vaccination session.***

**Table 3: Wastage rates and factors**

| Vaccine wastage rate | 5% | 10% | 15% | 20% | 25% | 30% | 35% | 40% | 45% | 50% | 55% | 60% |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Equivalent wastage factor | 1.05 | 1.11 | 1.18 | 1.25 | 1.33 | 1.43 | 1.54 | 1.67 | 1.82 | 2.00 | 2.22 | 2.50 |

**Please report the same figure as in table 1.*

## 3.3 Confirmed/revised request for injection safety support for the year 2004*(indicate forthcoming year)*

**Table 4: Estimated supplies for safety of vaccination for the next two years with BCG**

| | | Formula | For year 2004 | For year 2005 |
|---|---|---|---|---|
| **A** | **Target of children for 2004 vaccination [1]** | # | 3,956,775 | 4,056,730 |
| **B** | **Number of doses per child** | # | 1 | 1 |
| **C** | **Number of BCG doses** | A x B | 3,956,775 | 4.056,730 |
| **D** | **AD syringes (+10% wastage)** | C x 1.11 | 4,392,020 | 4,502,970 |
| **E** | **AD syringes buffer stock [2]** | D x 0.25 | 1,098,005 | - |
| **F** | **Total AD syringes** | D + E | 5,490,025 | 4,502,970 |
| **G** | **Number of doses per vial** | # | 20 | 20 |
| **H** | **Vaccine wastage factor [4]** | *Either 2 or 1.6* | 2 | 2 |
| **I** | **Number of reconstitution [3] syringes (+10% wastage) *** | *C x H x 1.11 / G* | 1,793,991 | 1,793,991 |
| **J** | **Number of safety boxes (+10% of extra need)** | *(F + I) x 1.11 / 100* | 80,853 | 69,896 |

* Calculation was done based on the number of sessions. The coverage considered 97% for 2004 and 98% for 2005

**Table 5: Estimated supplies for safety of vaccination for the next two years with DTP**

| | | Formula | For year 2004 | For year 2005 |
|---|---|---|---|---|
| **A** | **Target of children for DTP vaccination [1]** | # | 3,321,651 | 3,569,094 |
| **B** | **Number of doses per child** | # | 3 | 3 |
| **C** | **Number of DTP doses** | A x B | 9,964,952 | 10,707,282 |
| **D** | **AD syringes (+10% wastage)** | C x 1.11 | 11,061,097 | 11,885,083 |
| **E** | **AD syringes buffer stock [2]** | D x 0.25 | 2,765,274 | - |
| **F** | **Total AD syringes** | D + E | 13,826,371 | 11,885,083 |
| **G** | **Number of doses per vial** | # | 10 | 10 |
| **H** | **Vaccine wastage factor [4]** | *Either 2 or 1.6* | - | - |
| **I** | **Number of reconstitution [3] syringes (+10% wastage)** | *C x H x 1.11 / G* | - | - |
| **J** | **Number of safety boxes (+10% of extra need)** | *(F + I) x 1.11 / 100* | 153,473 | 131,924 |

The coverage considered 85% for 2004 and 90% for 2005

**Table 6: Estimated supplies for safety of vaccination for the next two years with Measles**

| | | Formula | For year 2004 | For year 2005 |
|---|---|---|---|---|
| **A** | **Target of children for Measles vaccination [1]** | # | 3,237,396 | 3,478,563 |
| **B** | **Number of doses per child** | # | 1 | 1 |
| **C** | **Number of Measles doses** | A x B | 3,237,396 | 3,478,563 |
| **D** | **AD syringes (+10% wastage)** | C x 1.11 | 3,593,510 | 3,861,205 |
| **E** | **AD syringes buffer stock [2]** | D x 0.25 | 898,377 | - |
| **F** | **Total AD syringes** | D + E | 4,491,887 | 3,861,205 |
| **G** | **Number of doses per vial** | # | 10 | 10 |
| **H** | **Vaccine wastage factor [4]** | *Either 2 or 1.6* | 1.67 | 1.67 |
| **I** | **Number of reconstitution [3] syringes (+10% wastage) *** | *C x H x 1.11 / G* | 1,793,991 | 1,793,991 |
| **J** | **Number of safety boxes (+10% of extra need)** | *(F + I) x 1.11 / 100* | 69,773 | 62,773 |

* Calculation was done based on the number of sessions. The coverage considered 85% for 2004 and 90% for 2005

**Table 7: Estimated supplies for safety of vaccination for the next two years with TT**

| | | Formula | For year 2004 | For year 2005 |
|---|---|---|---|---|
| A | Target of pregnant women for TT[1] | # | 4,691,021 | 4,760,449 |
| B | Number of doses per woman | # | 2 | 2 |
| C | Number of TT doses | A x B | 9,382,042 | 9,520,898 |
| D | AD syringes (+10% wastage) | C x 1.11 | 10,414,067 | 10,568,197 |
| E | AD syringes buffer stock [2] | D x 0.25 | 2,603,517 | - |
| F | Total AD syringes | D + E | 13,017,583 | 10,568,197 |
| G | Number of doses per vial | # | 10 | 10 |
| H | Vaccine wastage factor [4] | *Either 2 or 1.6* | - | - |
| I | Number of reconstitution [3] syringes (+10% wastage) | *C x H x 1.11 / G* | - | - |
| J | Number of safety boxes (+10% of extra need) | *( F + I ) x 1.11 / 100* | 144,495 | 117,307 |

**Table 8: Summary of total supplies for safety of vaccinations with BCG, DTP, TT and measles for the next two years.**

| ITEM | | For the year 2004 | For the year 2005 | Justification of changes from originally approved supply: |
|---|---|---|---|---|
| Total AD syringes | for BCG | 5,490,025 | 4,502,970 | In case of AD syringes for other vaccines we have considered the number of surviving neonates instead of surviving infants.<br>In Bangladesh the national policy is to provide 5 doses of TT to all 15 to 49 years women. As GAVI will provide support only for pregnant women for 2 doses so 100% of pregnant women has been considered.<br>Number of reconstitution syringe was calculated based on number of vaccination sessions and at least 2 reconstitution syringes (1 for BCG and 1 for Measles) were considered per session.<br>The required number of safety boxes also changed from the approved number due to increase in number of AD syringe and reconstitution syringes. Detailed justification of changes described earlier |
| | for other vaccines | 31,335,842 | 26,314,485 | |
| Total of reconstitution syringes | | 3,587,982 | 3,587,982 | |
| Total of safety boxes | | 448,594 | 381,900 | |

[1] GAVI will fund the procurement of AD syringes to deliver 2 doses of TT to pregnant women. If the immunization policy of the country includes all Women of Child Bearing Age (WCBA), GAVI/The Vaccine Fund will contribute to a maximum of 2 doses for Pregnant Women (estimated as total births).

[2] The buffer stock for vaccines and AD syringes is set at 25%. This is added to the first stock of doses required to introduce the vaccination in any given geographic area. Write zero for other years.

[3] Only for lyophilized vaccines. Write zero for other vaccines

4 Standard wastage factors will be used for calculation of re-constitution syringes. It will be 2 for BCG, 1.6 for measles and YF.

→ *If quantity of current request differs from the GAVI letter of approval, please present the justification for that difference.*

*In case of AD syringes for other vaccines the number of surviving neonates were considered instead of surviving infants. In the approved letter the number of AD syringe for other vaccines is 29,287,200 and the revised requirement is 31,335,842 for the year 2004. So additional 2,048,642 syringes will be needed.*

*Since the intensification of routine immunization in the year 1989 the operational strategy remains same. In the strategy there are 8 outreach centres in each rural ward, which operates vaccination session once in a month. Each outreach centre has a catchments population of around 1000. In Bangladesh there are 13,500 rural and around 527 urban wards. Based on this the total number of monthly session is around 134,684 of which 115,576 is outreach and 19,108 is fixed sessions. For the reconstitution syringe we have considered the number of sessions instead of number of doses and the reconstitution syringe will be needed at least one for BCG and one for Measles per session. For example, 3 reconstitution syringes will be required for 3 vials to vaccinate 20 children. But if the children come in four sessions then the number of required reconstitution syringe will be at least 4. In the approved letter the number of reconstitution syringe for BCG is 549,100 and for Measles is 718,800 (total-1,267,900) and the revised requirement is 3,587,982 (additional 2,320,082 syringes) for the year 2004.*

*The required number of safety boxes also changed from the approved number due to increase in number of AD syringe and reconstitution syringe.*

## 4. Please report on progress since submission of the last Progress Report based on the indicators selected by your country in the proposal for GAVI/VF support

| Indicators | Targets | Achievements | Constraints | Updated targets |
|---|---|---|---|---|
| 1. Introduction of Hep-B vaccine in routine EPI | All over the country by 2005 | Introduction completed in phase-1 areas. Expansion plan completed. | | |
| 2. Staff trained on EPI refresher | All managers, supervisors and field workers by 2003<br><br>Management and Micro | TOT and training completed in 21 Districts<br><br>Management and Micro | | |

| | | | | |
|---|---|---|---|---|
| 3. Upazila have planned activities for strengthen routine EPI<br><br>4. Development of financial management system for GAVI/VF | planning workshop at all Districts<br><br>By the year 2003 | planning workshop completed in 21 Districts<br><br>Selection of Firm done. Review of existing system completed. Four manuals were prepared and reviewing by the financial management sub committee | | |
| 5. Focal persons trained on cold chain and logistics management | By the year 2003 | Draft training manual developed | Training manual yet to be finalized | June 2004 |
| 6. Technical assistance for District level | In 25 low performing Districts | Recruitment of 25 District Immunization Medical Officers (DIMOs) completed. Training for the DIMOs completed | | |
| 7. National policy on Injection Safety | June 2003 | National policy finalized | Needs cabinet approval | December 2003 |
| 8. DQA recommendations were incorporated to improve the quality and reliability of data | By 2004 | Revised record keeping and reporting forms and piloted in Hep-B areas.<br><br>Expansion by 2004. | | |

## 5. Checklist

Checklist of completed form:

| Form Requirement: | Completed | Comments |
|---|---|---|
| Date of submission | 30.09.2003 | |
| Reporting Period (consistent with previous calendar year) | Jan-Dec 2002 | |
| Table 1 filled-in | 16.09.2003 | |
| DQA reported on | 25.02.2003 | The DQA findings was shared with the ICC members in 25 February 2003 |
| Reported on use of 100,000 US$ | 15.09.2003 | |
| Injection Safety Reported on | 10.09.2003 | The injection safety part was completed |
| FSP Reported on (progress against country FSP indicators) | 11.09.2003 | The FSP portion completed on 11 September 2003. The consultant is coordinating the FSP. |
| Table 2 filled-in | 08.09.2003 | |
| New Vaccine Request completed | 09.09.2003 | |
| Revised request for injection safety completed (where applicable) | 10.09.2003 | |
| ICC minutes attached to the report | | The electronic copy of the draft progress report shared with the ICC members on 21.09.2003 and finalized with their feedback on 27.09.2003. The report was discussed in the ICC meeting on 29 September 2003. The minutes will send after finalization. |
| Government signatures | 28.09.2003 | The Secretary, MOH&FW signed the copy on 28 September 2003 |
| ICC endorsed | 29.09.2003 | The meeting of the ICC was scheduled on 24 September. But due to unavoidable circumstances the Secretary, MOH&FW , Chairperson of the ICC rescheduled the meeting on 29 September. |

## 6. Comments

→ *ICC comments:*

*Although Bangladesh is planning to expand with monovalent Hep-B vaccine but the ICC still feels that Bangladesh should be in priority list for tetravalent vaccine whenever it becomes available.*

*ICC felt that the sub committees should compose of both GoB and development partners for smooth operation of planned activities.*

*The fund allocated for introduction of new vaccine is not sufficient to complete the planned activities. ICC is requesting to consider this issue and if possible to increase the amount.*

*As per Bangladesh EPI schedule all women aged 15-49 years will receive 5 doses of TT. So the ICC is requesting to consider all women of 15-49 years as target instead of only pregnant women for injection safety support.*

## 7. Signatures

For the Government of People's Republic of Bangladesh

Signature:

Name: A F M Sarwar Kamal
Title: Secretary, Ministry of Health and Family Welfare
Date:

We, the undersigned members of the Inter-Agency Co-ordinating Committee endorse this report. Signature of endorsement of this document does not imply any financial (or legal) commitment on the part of the partner agency or individual.

Financial accountability forms an integral part of GAVI/The Vaccine Fund monitoring of reporting of country performance. It is based on the regular government audit requirements as detailed in the Banking form. The ICC Members confirm that the funds received have been audited and accounted for according to standard government or partner requirements.

| Agency/Organisation | Name/Title | Signature | Date | Agency/Organisation | Name/Title | Signature | Date |
|---|---|---|---|---|---|---|---|
| Ministry of Finance | Mr. Siddiqur Rahman Chowdhury, Additional Secretary | | | IOCH | Dr. Pierre Claquin, Chief-of-Party | | |
| Ministry of Local Government & Rural Development | Mr. M. Sayeedur Rahman, Joint Secretary, Local Government Division | | | Rotary International | Mr. Iftekharul Alam, Chairman, Polio Plus | | |
| BRAC | Mr. Aminul Alam, Deputy Executive Director | | | UNICEF | Mr. Koyode Oyegbite, Chief, Heath & Nutrition Section | | |
| DFID | Dr. Neil Squires, Senior Advisor | | | USAID | Mr. Charles Llewellyn, Team Leader, PHN | | |
| Government of Japan | Mr. Massahiko Kiya Counsellor, Embassy of Japan | | | World Health Organization | Dr. Suniti Acharya, WHO Representative | | |
| World Bank | Ms. Birte Holm Sorensen, Senior PH Specialist | | | | | | |

~ End ~