



Partnering with The Vaccine Fund

# Annual Progress Report

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GAVI Secrétariat

02/083

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

by the Government of

**Federal Democratic Republic of Ethiopia**

Date of submission: October 11, 2002

Reporting period: 2001 (previous calendar year)

(Tick only one):

Inception report ☒

First annual progress report ☐ Financial sustainability plan attached ☐

Second annual progress report ☐

Third annual progress report ☐

Fourth annual progress report ☐

Fifth annual progress report ☐

## 1. Progress Report

*(Number of children immunized with current and new vaccines is collected from the WHO/UNICEF Joint Reporting Form (JRF))*

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

### 1.1. Immunization Services

#### 1.1.1 Receipt of immunization services funding

*Date(s) of receipt of funds April 30, 2002.*

*Please report on the progress, including any problems that have been encountered with regard to support for immunization strengthening. Please describe the mechanism for management of these funds, including the role of the Inter-Agency Co-ordinating Committee (ICC).*

The funds and AD syringes were distributed to the regions based on their under one population with clear information on how to use them and report the activities and expenditures before December 2002. As there are often delays in fund distribution from the center to the different levels the reports from the periphery to the center may also be delayed

#### 1.1.2 Statement on use of GAVI/The Vaccine Fund immunization services support

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

| Area of immunization services support | Total amount in US \$ | Proportion of funds by level |          |                  |
|---------------------------------------|-----------------------|------------------------------|----------|------------------|
|                                       |                       | Central                      | District | Service delivery |
| Vaccines                              | NA                    |                              |          |                  |
| Injection supplies                    | 2,281,300             | 0                            |          |                  |
| Personnel                             | 100%                  | None                         | 20%      | 80%              |
| Transportation                        | NA                    | NA                           | NA       | NA               |
| Maintenance and overheads             | -                     | -                            | -        | -                |
| Training                              | -                     | -                            | -        | -                |
| IEC/social mobilization               | -                     | -                            | -        | -                |
| Monitoring and surveillance           | -                     | -                            | -        | -                |

|                      |   |   |   |   |
|----------------------|---|---|---|---|
| Vehicles             | - | - | - | - |
| Cold chain equipment | - | - | - | - |
| Others.....(specify) | - | - | - | - |

Please indicate the date(s) the ICC meeting(s) when allocation funds discussed  
September 2002

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

A plan of action to improve the reporting system based on the recommendations from the DQA, has been prepared

YES

☐

NO

☒

The plan of action has been discussed and endorsed by the ICC.

**1.2 New & Under-used Vaccines**

**1.2.1 Receipt of new and under-used vaccines:**

***Date(s) of receipt of vaccines.***

No application was submitted for new vaccines

*Please report on the progress, including starting date of vaccinations and any problems that have been encountered with regard to vaccines and supplies provided by GAVI/The Vaccine Fund.*

**1.2.2 Major activities**

*Please outline what major activities have been or will be undertaken to prepare for new vaccine introduction.*

Ethiopia has a plan to apply for new vaccines in the near future

2.3 Statement of GAVI/The Vaccine Fund financial support (US\$ 100,000) for the production of the new vaccine

The following table shows the amount of vaccine funded since the start of the project. The total fund support

None

## ***Injection safety***

### **1.3.1 Receipt of injection safety support**

*Please report on the progress, including any problems that have been encountered with regard to the injection safety support.*

The injection safety support has allowed Nation-wide appreciation of AD syringes and a gradual phase out of the reusable needles. The regions have collected their injection materials and training is combined with the Mid-Level-Managers (MLM) and operational level training.

The problems encountered are the space needed for storage, which decrease as one gets down to the woreda/district and operational levels. The issue of safe disposal of sharps has not been adequately addressed. Studies on Injection Practices indicated that only about 30% of facilities have proper incinerators and safe disposal was still major problem. Only about 10% of facilities with incinerators do know how to use them properly. There is need for funding in Ethiopia for proper training on the use of incinerators and the need to construct more.

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

*Should include objectives, indicators, main achievements, main constraints and targets for next year.*

The main objective is to have all the woredas/ districts in the country phase out of reusable needles and syringes to AD syringes by the end of 2003. Two persons in each facility should be trained on the use of AD syringes. The facilities are to ensure safe and proper disposal of sharp waste.

The indicators include monitoring the number of districts that have phased out completely from reusable needles and syringes, the number and percentage of facilities with two trained persons and with proper disposal of sharp waste.

The main achievements include the availability of AD syringes now in all the regions of the country, the training of about 150 Mid-level-Managers and about 500 operational level health workers. There is an increase in the awareness

for the use of AD syringes to prevent other diseases like HIV/AIDS and hepatitis. Mothers are becoming more aware of the hazards of using unsafe needles and syringes.

The main constraint is the lack of funds to construct needed incinerators and high staff attrition with the need to keep training and re-training of health workers.

By the end of 2003, all the woredas/districts in the country would be have completely phased out of reusable needles and syringes. All the regional and woreda EPI coordinators would be trained. About 50% of health facilities workers would be trained on safe injection procedures.

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

No support in the form of cash was received for injection safety we only have received Ad syringes

*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:*

Currently it is not applicable to Ethiopia

## 2. Financial sustainability

|                      |                                                                          |
|----------------------|--------------------------------------------------------------------------|
| Inception Report:    | Outline steps towards the development of a financial sustainability plan |
| First Annual Report: | Submit completed financial sustainability plan                           |
| Subsequent Reports:  | Summarize progress on financial sustainability                           |

Some regional governments have started allocating fund for routine immunization, however, for complete national sustainability plan, a letter has to be sent to the MOH from GAVI Secretariat as promised in GAVI meeting at Pretoria. In that meeting it was promised that GAVI would write a letter to individual countries that got the support to develop sustainability plan to be implemented when the GAVI support phases out. Therefore, we hope that GAVI will help individual countries develop sustainability plan in order to determine their capacities to take over all the activities, which have been under the GAVI support.

### 3. Request for new and under-used vaccines for year. (Indicate forthcoming year)

Not applicable at this time

#### 3.1 Up-dated immunization targets

Confirm/update basic data (= surviving infants, DTP3 targets, New vaccination targets) of the multi-year immunization plan approved with country application: revised Table 4 of approved application form and give reasons for any changes.

**Table 1: Baseline and annual targets**

| Number of                                                       | Baseline and targets |           |           |           |           |           |           |      |
|-----------------------------------------------------------------|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|------|
|                                                                 | 2000                 | 2001      | 2002      | 2003      | 2004      | 2005      | 2006      | 2007 |
| Births                                                          | 2,804,561            | 2,607,469 | 2,969,584 | 3,055,072 | 3,144,318 | 3,235,503 | 3,329,333 |      |
| Infants' deaths                                                 | 272,042              | 255,802   | 288,050   | 296,403   | 304,999   | 3,138,444 | 322,945   |      |
| Surviving infants                                               | 2,53,2519            | 2,351,667 | 2,681,535 | 2,759,299 | 2,839,319 | 2,921,659 | 3,006,387 |      |
| Infants vaccinated with DTP3 *                                  | 1,147,973            | 1,200,578 | 1,340,768 | 1,517,614 | 1,703,591 | 1,899,078 | 2,104,471 |      |
| Infants vaccinated with * ... (use one row for any new vaccine) |                      |           |           |           |           |           |           |      |
| Wastage rate of ** ..... ( new vaccine)                         |                      |           |           |           |           |           |           |      |

\* 2001 data computed from 2000-2001 Health and Health Related indicators from Ministry of Health

- \* Indicate actual number of children vaccinated in past years
- \*\* Indicate actual wastage rate obtained in past years

If the request for supply for the coming years differs from previously approved plan:

*Please indicate the reasons for those changes and, where relevant, the related modifications of targets of children to be vaccinated, wastage rate and type of vaccine. Indicate that UNICEF Supply Division has assured the availability of the new quantity of supply according to new changes. Summarise the related modifications of the activities and of the budgets of the work-plan for introduction of new vaccines and indicate the date of the ICC meeting when the changes were endorsed.*

No change was made from the previous approved plan.

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

### 3.3

**Table 2: Estimated number of doses of vaccine (specify for one presentation only) : (Please repeat this table for any other vaccine presentation requested from GAVI/The Vaccine Fund**

|   |                                                        | Formula                            | For year ..... |
|---|--------------------------------------------------------|------------------------------------|----------------|
| A | Number of children to receive new vaccine              |                                    |                |
| B | Percentage of vaccines requested from The Vaccine Fund | %                                  |                |
| C | Number of doses per child                              |                                    |                |
| D | Number of doses                                        | $A \times B/100 \times C$          |                |
| E | Estimated wastage factor                               | (see list in table 3)              |                |
| F | Number of doses (incl. wastage)                        | $A \times C \times E \times B/100$ |                |
| G | Vaccines buffer stock                                  | $F \times 0.25$                    |                |
| H | Anticipated vaccines in stock at start of year ....    |                                    |                |
| I | Total vaccine doses requested                          | $F + G - H$                        |                |
| J | Number of doses per vial                               |                                    |                |
| K | Number of AD syringes (+ 10% wastage)                  | $(D + G - H) \times 1.11$          |                |
| L | Reconstitution syringes (+ 10% wastage)                | $I/J \times 1.11$                  |                |
| M | Total of safety boxes (+ 10% of extra need)            | $(K + L)/100 \times 1.11$          |                |

### 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. For vaccine in single or two-dose vials the maximum wastage allowance is 5%. 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... ..:** 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

**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 |

### 3.3 Confirmed/revised request for injection safety support

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

**Table 4.1: Estimated supplies for safety of vaccination for the next two years with BCG** *(Use one table for each vaccine BCG, DTP, measles and TT, and number them from 4.1 to 4.4)*

|   |                                                                | Formula              | 2003      | 2004      |
|---|----------------------------------------------------------------|----------------------|-----------|-----------|
| A | Target of children for BCG vaccination                         | #                    | 1,614,064 | 1,785,154 |
| B | Number of doses per child (for TT woman)                       | #                    | 1         | 1         |
| C | Number of BCG doses                                            | A x B                | 1,614,064 | 1,785,154 |
| D | AD syringes (+10% wastage)                                     | C x 1.11             | 1,791,611 | 1,981,521 |
| E | AD syringes buffer stock <sup>1</sup>                          | D x 0.25             | -         | -         |
| F | Total AD syringes                                              | D + E                | 1,791,611 | 1,981,521 |
| G | Number of doses per vial                                       | #                    | 20        | 20        |
| H | Vaccine wastage factor                                         |                      | 2         | 2         |
| I | Number of re-constitution <sup>2</sup> syringes (+10% wastage) | C x H x 1.11 / G     | 179,161   | 198,152   |
| J | Number of safety boxes (+10% of extra need)                    | (F + I) x 1.11 / 100 | 21,986    | 24,194    |

<sup>1</sup> The buffer stock for vaccines and AD syringes is set at 25%. This is calculated with the first stock of doses required to introduce the vaccination in any given geographic area. Write zero for other years.

<sup>2</sup> Only for lyophilized vaccines. Write zero for other vaccines

**Table 4.2: Estimated supplies for safety of vaccination for the next two years with DPT (Use one table for each vaccine BCG, DTP, measles and TT, and number them from 4.1 to 4.4)**

|          |                                                                                              | Formula                     | For year 2003    | For year 2004    |
|----------|----------------------------------------------------------------------------------------------|-----------------------------|------------------|------------------|
| <b>A</b> | <b>Target of children for DPT vaccination (for TT: target of pregnant women)<sup>3</sup></b> | <b>#</b>                    | <b>1,365,746</b> | <b>1,530,132</b> |
| <b>B</b> | <b>Number of doses per child (for TT woman)</b>                                              | <b>#</b>                    | <b>3</b>         | <b>3</b>         |
| <b>C</b> | <b>Number of ..... doses</b>                                                                 | <b>A x B</b>                | <b>4,097,239</b> | <b>4,590,396</b> |
| <b>D</b> | <b>AD syringes (+10% wastage)</b>                                                            | <b>C x 1.11</b>             | <b>4,547,935</b> | <b>5,095,340</b> |
| <b>E</b> | <b>AD syringes buffer stock <sup>4</sup></b>                                                 | <b>D x 0.25</b>             | <b>0</b>         | <b>0</b>         |
| <b>F</b> | <b>Total AD syringes</b>                                                                     | <b>D + E</b>                | <b>4,547,935</b> | <b>5,095,340</b> |
| <b>G</b> | <b>Number of doses per vial</b>                                                              | <b>#</b>                    | <b>10</b>        | <b>10</b>        |
| <b>H</b> | <b>Vaccine wastage factor <sup>5</sup></b>                                                   | <b>Either 2 or 1.6</b>      |                  |                  |
| <b>I</b> | <b>Number of reconstitution <sup>6</sup> syringes (+10% wastage)</b>                         | <b>C x H x 1.11 / G</b>     | <b>0</b>         | <b>0</b>         |
| <b>J</b> | <b>Number of safety boxes (+10% of extra need)</b>                                           | <b>(F + I) x 1.11 / 100</b> | <b>45,479</b>    | <b>50,953</b>    |

<sup>3</sup> 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).

<sup>4</sup> 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.

<sup>5</sup> Standard wastage factor will be used for calculation of re-constitution syringes. It will be 2 for BCG, 1.6 for measles and YF.

<sup>6</sup> Only for lyophilized vaccines. Write zero for other vaccines

**Table 4.3: Estimated supplies for safety of vaccination for the next two years with measles** (*Use one table for each vaccine BCG, DTP, measles and TT, and number them from 4.1 to 4.4*)

|          |                                                                                            | Formula              | For year 2003 | For year 2004 |
|----------|--------------------------------------------------------------------------------------------|----------------------|---------------|---------------|
| <b>A</b> | Target of children for measles vaccination (for TT: target of pregnant women) <sup>7</sup> | #                    | 1,241,588     | 1,402,621     |
| <b>B</b> | Number of doses per child (for TT woman)                                                   | #                    | 1             | 1             |
| <b>C</b> | Number of measles doses                                                                    | A x B                | 1,241,588     | 1,402,621     |
| <b>D</b> | AD syringes (+10% wastage)                                                                 | C x 1.11             | 1,378,162     | 1,556,909     |
| <b>E</b> | AD syringes buffer stock <sup>8</sup>                                                      | D x 0.25             | 0             | 0             |
| <b>F</b> | Total AD syringes                                                                          | D + E                | 1,378,162     | 1,556,909     |
| <b>G</b> | Number of doses per vial                                                                   | #                    | 10            | 10            |
| <b>H</b> | Vaccine wastage factor <sup>9</sup>                                                        | Either 2 or 1.6      | 1.6           | 1.6           |
| <b>I</b> | Number of reconstitution <sup>10</sup> syringes (+10% wastage)                             | C x H x 1.11 / G     | 24,476        | 27,651        |
| <b>J</b> | Number of safety boxes (+10% of extra need)                                                | (F + I) x 1.11 / 100 | 15,569        | 17,589        |

<sup>7</sup> 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).

<sup>8</sup> 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.

<sup>9</sup> Standard wastage factor will be used for calculation of re-constitution syringes. It will be 2 for BCG, 1.6 for measles and YF.

<sup>10</sup> Only for lyophilized vaccines. Write zero for other vaccines

**Table 4.4: Estimated supplies for safety of vaccination for the next two years with TT** (Use one table for each vaccine BCG, DTP, measles and TT, and number them from 4.1 to 4.4)

|                                                                                         | Formula              | For year 2003 | For year 2004 |
|-----------------------------------------------------------------------------------------|----------------------|---------------|---------------|
| Target of children for TT vaccination (for TT : target of pregnant women) <sup>11</sup> | #                    | 1,385,554     | 1,568,308     |
| Number of doses per child (for TT woman)                                                | #                    | 2             | 2             |
| Number of TT doses                                                                      | A x B                | 2,771,108     | 3,136,616     |
| AD syringes (+10% wastage)                                                              | C x 1.11             | 3,075,930     | 3,481,644     |
| AD syringes buffer stock <sup>12</sup>                                                  | D x 0.25             | 0             | 0             |
| Total AD syringes                                                                       | D + E                | 3,075,930     | 3,481,644     |
| Number of doses per vial                                                                | #                    | 10            | 10            |
| Vaccine wastage factor <sup>13</sup>                                                    | Either 2 or 1.6      |               |               |
| Number of reconstitution <sup>14</sup> syringes (+10% wastage)                          | C x H x 1.11 / G     | 0             | 0             |
| Number of safety boxes (+10% of extra need)                                             | (F + I) x 1.11 / 100 | 30,759        | 34,816        |

**Table 5: Summary of total supplies for safety of vaccination with BCG, DPT, TT and measles for the next two years.**

| Item                          |                    | For the year 2003 | For the year 2004 | Justification of changes from originally approved supply                                                                                                                                                                         |
|-------------------------------|--------------------|-------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Total AD syringes             | For BCG            | 1,791,611         | 1,981,521         | 1. The target coverage of DPT and measles increased by 5% because of 2001 administrative coverage (DPT3 2003 from 55% to 60%, measles 2003 from 50 to 55%)<br>2. The crude birth rate reduced and then surviving infants reduced |
|                               | For other vaccines | 9,002,027         | 10,133,893        |                                                                                                                                                                                                                                  |
| Total reconstituting syringes |                    | 203,637           | 225,803           |                                                                                                                                                                                                                                  |
| Total of safety boxes         |                    | 113,684           | 127,553           |                                                                                                                                                                                                                                  |

<sup>11</sup> 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).

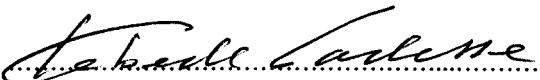
<sup>12</sup> The buffer stock for vaccines and AD syringes is set at 25%. This is added to the first stock of doses required to introduce the vaccination in any given geographic area. Write zero for other years.

<sup>13</sup> Standard wastage factor will be used for calculation of re-constitution syringes. It will be 2 for BCG, 1.6 for measles and YF.

<sup>14</sup> Only for lyophilized vaccines. Write zero for other vaccines

## 4. Signatures

For the Government of ...

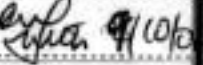
Signature: 

Title:

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          | Date    | Signature                                                                             | Agency/Organisation |
|---------------------|---------------------|---------|---------------------------------------------------------------------------------------|---------------------|
| Ministry of Health  | Dr. Tesfanech Belay | 7/10/02 |    | ESRC/ERCS           |
| WHO                 | Dr. Angela Benson   | 9/10/02 |   | ROTARY              |
| USAID               | Dr. A. Tempo        | 9/10/02 |  | JICA                |
| UNICEF              | Dr. Mahendra Sheth  | 9/10/02 |  | EHNRI               |
|                     |                     |         |                                                                                       |                     |