SECOND GAVI EVALUATION
GAVI ALLIANCE

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SUPPORTING PAPER 4.2:
MALI COUNTRY STUDY REPORT

Submitted by:

CEPA LLP
### ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AD</td>
<td>Auto Disable (syringes)</td>
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<tr>
<td>APR</td>
<td>Annual Progress Report</td>
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<td>BCG</td>
<td>Bacille-Calmette-Guerin</td>
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<td>CEPA</td>
<td>Cambridge Economic Policy Associates</td>
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<td>cMYP</td>
<td>comprehensive Multi-Year Plan</td>
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<td>CRO</td>
<td>Country Representative Officer</td>
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<td>CSO</td>
<td>Civil Society Organisation</td>
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<td>DFID</td>
<td>Department for International Development</td>
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<td>DHS</td>
<td>Demographic and Health Survey(s)</td>
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<tr>
<td>DTP(3)</td>
<td>(Third dose of) Diphtheria, Pertussis and Tetanus</td>
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<td>DQA</td>
<td>Data Quality Audit</td>
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<td>DQS</td>
<td>Data Quality Self-assessment</td>
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<td>EC</td>
<td>European Commission</td>
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<td>EPI</td>
<td>Expanded Program on Immunisation</td>
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<td>EU</td>
<td>European Union</td>
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<td>EVSM</td>
<td>Effective Vaccine Store Management</td>
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<td>FMA</td>
<td>Financial Management Assessment</td>
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<td>GAVI</td>
<td>Global Alliance for Vaccine and Immunisation</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GIVS</td>
<td>Global Immunisation Vision and Strategy</td>
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<td>GNP</td>
<td>Gross National Product</td>
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<td>GFATM</td>
<td>Global Fund to fight AIDS, Tuberculosis and Malaria</td>
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<td>GNI</td>
<td>Gross National Income</td>
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<td>Hep B</td>
<td>Hepatitis B</td>
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<td>HSCC</td>
<td>Health Sector Coordination Committee</td>
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<td>HSS</td>
<td>Health System Strengthening</td>
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<td>ICC</td>
<td>Inter-agency Coordination Committee</td>
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<td>IEC</td>
<td>Information, Education and Communication</td>
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<td>IHP+</td>
<td>International Health Partnership</td>
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<td>INS</td>
<td>Injection Safety Support</td>
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<td>ISS</td>
<td>Immunisation Services Support</td>
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<td>JSI</td>
<td>John Snow, Inc.</td>
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<td>MOF</td>
<td>Ministry of Finance</td>
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<td>MOH</td>
<td>Ministry of Health</td>
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<td>NIP</td>
<td>Centre National d’Immunisation (French translation)</td>
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<td>NVS</td>
<td>New and underused Vaccines Support</td>
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<td>PDSS</td>
<td>Health and Social Development Plan</td>
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<td>PEV</td>
<td>EPI in Mali</td>
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<td>PRODESS</td>
<td>Program of the Social and Sanitary Development/ Health and Social Development Program</td>
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<td>SG</td>
<td>Strategic Goal</td>
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<td>TAP</td>
<td>Transparency and Accountability Policy</td>
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<td>UNAIDS</td>
<td>Joint United Nations Programme on HIV/AIDS</td>
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<td>Acronym</td>
<td>Description</td>
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<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>WB</td>
<td>World Bank</td>
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<td>WHO</td>
<td>World Health Organisation</td>
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EXECUTIVE SUMMARY

This is an executive summary of the Country Evaluation Report for Mali, undertaken as a part of the GAVI second evaluation.

The report provides contextual information on Mali’s health and immunisation sector, and assesses the results and value add of GAVI programs in the country. While the contextual information draws primarily on a desk-based review of the available literature/reports, the assessment of GAVI support to Mali draws heavily on feedback received from country stakeholders.\(^1\) This is supplemented by a desk review of GAVI documentation (for example, the Mali Annual Progress Reports, etc) as appropriate.

The overall conclusion is that GAVI has provided a boost/reinforcement to the immunisation sector in Mali. However GAVI’s performance in the country has varied across the four Strategic Goals (SG)\(^2\) of the Alliance. Below are our overall judgements on results and value add with respect to each of the Goals, drawing on feedback from the country visit and available data/information.

- **Health Systems Strengthening (SG1):** Mali has received health systems strengthening support from three of the four GAVI windows of support – Injection Safety Support (INS), Immunisation Safety Support (ISS) and Health System Strengthening (HSS).\(^3\)

  INS support has been particularly successful, in that Mali has adopted the use of Auto Disable (AD) syringes and safety boxes for routine immunisation, and post GAVI funding, the government has continued to fund their purchase. However lack of sufficient capacity for waste management is an important issue, and could come under further pressure with the planned introduction of the pneumococcal vaccine. An important value add of GAVI INS support is seen in its catalytic role in encouraging the widespread adoption of AD syringes and safety boxes in other health sectors.

  Feedback on GAVI ISS support was more mixed. While deemed important for strengthening immunisation systems when provided, the termination of ISS support to Mali since 2007 (due to data quality issues) has posed an important issue. There has been no replacement in funding for the activities/items that were previously funded through ISS, and lack of communication from GAVI has implied that approximately $1m of unspent ISS funds have not been used by the country. A value add of the experience of

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1. CEPA and our local consultant, Prof. Abdel Koumare, met with country stakeholders during the week of 26 April 2010 in Bamako. Dr. Abdallah Bchir from the GAVI Secretariat also accompanied the team for the field visit.

2. GAVI’s four strategic goals for 2007-10 are: (1) Contribute to strengthening the capacity of the health system to deliver immunisation and other health services in a sustainable manner; (2) Accelerating the uptake and use of underused and new vaccines and associated technologies and improve vaccine supply security; (3) Increase the predictability and sustainability of long-term financing for national immunisation programs; and (4) Increase and assess the added-value of GAVI as a public private global health partnership through improved, efficiency, increased advocacy, and continued innovation.

3. Mali has not applied for Type A Civil Society Organisation (CSO) support. Our consultations revealed some awareness regarding this window of GAVI support, however there wasn’t a lot of keenness in applying for GAVI support, especially in the context of the limited amount of funding as well as the fact that the funds would be channelled through the government.
ISS funding for Mali has however been that it has encouraged the government to focus on improving its data quality.

In terms of HSS funding, while implementation was delayed due to miscommunication between government departments, all activities elucidated in their proposal are now being actively implemented. While it is still too early to comment on impact, the value add of GAVI HSS in Mali is seen in its greater ‘visibility’ amongst government as compared to other donor funding, as well as the fact that it has encouraged the government to think more strategically about the need to access additional resources from donors for HSS.

- **Vaccine Support (SG2):** Country stakeholders attribute GAVI New and underused Vaccines Support (NVS) for diversifying the antigens included in Mali’s routine immunisation schedule. GAVI support for yellow fever since 2002 has been very important in contributing to its eradication in the country.

- **Financing (SG3):** There are two clear messages with regards to financing of vaccines in Mali: (i) in the absence of GAVI support, the government would not be able to afford access to these new vaccines; and (ii) were GAVI funding to be terminated, given current price levels, the government does not have the financial capacity to continue funding its requirements for the new vaccines.

Mali has met its commitments for co-financing in 2008, but more recently we understand that the government is facing a lack of funds to purchase both traditional vaccines and meet its co-financing requirement, resulting in some stock outs.

In addition, the sustainability of ISS funding, as noted above, is also an issue at present.

- **Added value as a global Public Private Partnership (PPP) (SG4):** GAVI’s technical partners in country, particularly WHO and UNICEF, appear to be actively involved, both in working with the government to develop proposals to access funds/ support, as well as in implementation. Their role through the Inter-agency Coordination Committee (ICC) and Health Sector Coordination Committee (HSCC) equivalent committees was also considered important and effective, particularly through the Technical Sub-Committees – although it is noted that the policy level committees do not meet regularly.

Government officials also indicated that they found the role of WHO and UNICEF as very useful in relation to GAVI.

There are some issues with regards to lack of timely and sufficient information from GAVI (on its processes, requirements, disbursement of funds, etc.) that have impeded Mali’s access to GAVI funds and effective implementation of approved support. Government officials did suggest that they would find it useful to have more, clearer and timely information from the GAVI Secretariat.
1. **INTRODUCTION**

1.1. **Background and purpose**

This is the Country Evaluation Report for Mali, developed as part of the second evaluation of Global Alliance for Vaccines and Immunisation (GAVI). The report is prepared by CEPA⁴ with inputs from the country consultant, Prof. Abdel Karim Koumare.

The purpose of the report is to provide an evaluation of the results and value add of GAVI in Mali, drawing on country stakeholder perspectives.

1.2. **Methodology**

This report has been informed by the following sources of evidence:

- Analysis of country data on health and immunisation. Annex 1 presents the data.
- A review of the relevant literature, including country reports, academic papers, country health plans, GAVI documentation, etc. Annex 2 sets out the bibliography.
- Interviews with relevant country stakeholders during a field trip to Mali in the week of 26th April 2010. Annex 3 lists the consultees.

1.3. **Structure of the report**

The report is structured as follows:

- Section 2 provides some background in terms of an overview of the key political and economic developments, and the health sector in the country.
- Section 3 synthesises the history and current state of the country’s immunisation sector.
- Section 4 provides an overview of GAVI support to Mali to date.
- Section 5 provides an assessment of GAVI’s support for health systems strengthening programs in the country (Strategic Goal 1)⁵.
- Section 6 assesses GAVI’s support for vaccines in country (Strategic Goal 2).
- Section 7 discusses the sustainability of GAVI funding in Mali (Strategic Goal 3).
- Section 8 reviews the effectiveness of GAVI structures and processes in country (Strategic Goal 4).
- Section 9 presents a summary evaluation of GAVI’s results and value added in Mali across the programs.

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⁴ A Consortium led by CEPA ([www.cepa.co.uk](http://www.cepa.co.uk)) has been appointed by the GAVI Alliance to undertake its second evaluation.

⁵ SG1 programs cover Immunisation Services Support (ISS), Injection Safety Support (INS), Civil Society Organisations support (CSO), and Health System Strengthening support (HSS).
2. **Overview of Country Context**

2.1. **Demographic, social and economic profile**

Mali has a population of 13.4 million spread over 1,241,238 sq. km (average density is 10.8 persons per sq. km). 72.7% of the population lies in rural areas. Three-fourths of the population lives in four regions of the country – Bamako, Mopti, Sikasso and Koulikoro. As per the 1998 census, the annual rate of population growth is about 2.8%.

With a Gross National Product (GNP) per capita of US$240, Mali is one of the poorest countries in the world. In all regions outside of Bamako, more than half of the population (50-80%) lives below the poverty line. The proportion of poor in the rural areas is 75% as against 25% in urban areas. The primary economic activity in the country is farming.

2.2. **Background to the health sector**

2.2.1. **Structure of the health sector**

The health system in Mali is organised as a three-tiered structure.

The first health system level comprises community health centres, religious health facilities, inter-enterprise medical centres, army health centres and maternity hospitals, private health clinics and country doctors. There are pharmacies and private stockists of medicines in certain locations which also contribute to providing health coverage for the population. The network of traditional medicine practitioners is also included at this level.

The second level comprises the referral health centres that provide everyday health care as well as take on referrals from community health centres. There are also medical surgeries, clinics and private pharmacies at this level that contribute to the care system.

The third level is represented by regional, national hospitals and scientific/technical public institutions. Their mission is focused on taking on referrals, training staff and public health measures.

2.2.2. **Main health sector policy**

The key health sector policy in Mali is the ‘Program of the Social and Sanitary Development/Health and Social Development Program (PRODESS)’. The main objectives of the policy are to assure access to health services for the population and reduce morbidity and the mortality of the priority diseases.

The policy was initially developed for the period 1998-2007, and subsequently rolled into two further phases: PRODESS II: Multiple Annual Plan of development (2005-09) and PRODESS II Prolonged (2009-11).

2.2.3. **Key health indicators**

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6 Please note that this section draws on the information provided in the Mali cMYP.
Mali has high levels of morbidity and mortality, particularly with respect to women and children. The Demographic and Health Survey (DHS) 2006 notes the following key health sector indicators: The infant mortality rate is close to 96 per 1,000; under-five mortality is 191 per 1,000 live births; and maternal mortality rate is also high at 464 per 100,000 live births.

More details are provided in Annex 1.

2.2.4. Key health sector donors

In April 2009, Mali became the fourth country to sign an International Health Partnership (IHP+) Compact\(^7\), which is an understanding between the government of a developing country and its development partners and a framework for increased and effective aid.

Twelve development partners (Belgium, Canada, European Commission, France, Sweden, Switzerland, The Netherlands, UNAIDS, UNICEF, WHO and World Bank), donor countries and international health agencies signed the Compact and pledged to increase and streamline their efforts in assisting Mali to improve health results. Key donor commitments laid down in the Compact include reducing the financing gap, predictable funding and greater alignment to national planning, budgeting and aid management procedures. The expectation is that Compact will strengthen dialogue and cooperation among partners and promote mutual accountability.

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\(^7\)Source: http://www.internationalhealthpartnership.net/pdf/IHP%20Update%202013/Mali/International%20Donors%20commit%20to%20help%20Mali%20in%20improving%20health%20results.pdf

\(^8\)The IHP+ seeks to achieve better health results by mobilising donor countries, other development partners and international health agencies around a single country-led national health strategy, guided by the principles of the Paris Declaration on Aid Effectiveness to reach the health MDGs. As of April 2009, the IHP+ had 35 signatories.
3. IMMUNISATION SECTOR

The Expanded Program on Immunisation (EPI) in Mali was launched in December 1986. The national EPI policy targets children less than one year of age and women in child bearing age. The key diseases that are currently being targeted are Hepatitis B, Yellow Fever, Hib, tuberculosis, Measles, Tetanus, Diphtheria, Whooping cough and Poliomyelitis.

3.1. Government institutional structure for immunisation

One of the biggest challenges for immunisation in Mali is the position of the immunisation department within the Ministry of Health (MOH). The immunisation department (NIP/ CNI) is not a Directorate in the MOH, but rather has a lower ranked office in the Government hierarchy. This institutional placement of the immunisation department has deterred it from carrying out its role effectively – in particular, it does not have access to the GAVI funds directly, as is the case in most other GAVI–supported countries.

This issue has also been highlighted previously, but in addition, we also received anecdotal evidence during the field visit that suggested a planned change in this institutional structure of the immunisation department.

3.2. Government and donor funding for the immunisation sector

There is a line in the national budget for the purchase of vaccines and consumables (syringes, safety boxes etc). As per the comprehensive Multi-Year Plan (cMYP), the government is the largest financier of the immunisation plan/strategy.

Donor partners such as GAVI, WHO, UNICEF, USAID and Rotary International are also important. In addition to GAVI, key partners in immunisation at the national level are WHO, UNICEF, Japan (support provided for cold chain in particular) and Rotary International (polio).

At the local level, bilateral contributions from France, Switzerland and Canada are prominent.

3.3. Performance of immunisation sector

Figure 3.1 below presents DTP3 coverage estimates for the period starting in the early 1980s up to 2007. Annex 1 provides more data on other estimates of immunisation coverage.

There is a clear rising trend in coverage rates between 2000 and 2005, according to both official figures and WHO/UNICEF estimates – however, a large discrepancy between the two estimates is also clearly noted. The DTP3 coverage rate reported in the DHS survey is also close to the WHO/UNICEF estimates. Data quality is a key issue in Mali at present (also discussed further in the sections below).
Figure 3.1: Mali - DTP3 Vaccine coverage figures - Official figures and WHO/UNICEF estimates (%)\(^9\)

\(^9\) Official figures sourced from annual WHO/UNICEF Joint Reporting Form and WHO Regional offices reports; Data received directly from GAVI.
4. Overview of GAVI Support in Mali

Mali has a long history of support from GAVI, having received its first grant for ISS in 2001, followed by NVS support for yellow fever in 2002. Over the period 2001-10, GAVI approved a total of $54.2m for Mali, of which $34.0m has been disbursed to date. GAVI funding to Mali over the period 2001-10 represents 1.8% and 1.5% of the total funding approved and disbursed to GAVI-eligible countries over the period.

Figure 4.1 presents the approvals and disbursements over the period. As can be seen from the figure, approvals match disbursements until 2008. In 2009, GAVI did not disburse the amount approved for HSS funding, the reasons for which are discussed in more detail in Section 5. In 2010, the discrepancy between approvals and disbursements is mainly on account of the approval for pneumo (as also the fact that our disbursement data is for early 2010).

Figure 4.1: Mali - GAVI approvals and disbursements (US$m)

The total support to date comprises the following:

- NVS support for HepB from 2003, which was rolled into penta support from 2005 onwards, as well as support for yellow fever. Mali has also been approved for pneumo, although this has not been disbursed yet due to the delays in the AMC.

- INS support over the period 2003-05.

- ISS support since 2001, with a gap in 2005 (due to data issues, again discussed in more detail in Section 5), until 2007.

- HSS support from 2008, and approved until 2010.

Mali has not received any support through the CSO window to date.

Figure 4.2 below shows the breakdown of approved and disbursed funds, across years and by GAVI program. Approximately 80% of both the approvals and disbursements have been made under the NVS program. In terms of disbursed funds, the second largest program is ISS.

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10 Figures sourced from "CEPA - GAVI Phase I & II consolidated approvals & disbursements" spreadsheet, received from the GAVI Secretariat.

11 Where lines overlap, disbursements are equal to approvals.
Figure 4.2: GAVI approvals and disbursements data 2001-10 ($m)

**Approvals**

- 2001: 0.0 (HSS: 0.0, INS: 0.0, ISS: 0.0, NVS: 0.0)
- 2002: 0.7 (HSS: 0.7, INS: 0.0, ISS: 0.0, NVS: 0.0)
- 2003: 4.8 (HSS: 4.8, INS: 0.0, ISS: 0.0, NVS: 0.0)
- 2004: 9 (HSS: 9, INS: 0.0, ISS: 0.0, NVS: 0.0)
- 2005: 43.4 (HSS: 43.4, INS: 0.0, ISS: 0.0, NVS: 0.0)
- 2006: 5.4 (HSS: 5.4, INS: 0.0, ISS: 0.0, NVS: 0.0)
- 2007: 78% (HSS: 78%, INS: 2%, ISS: 0%, NVS: 0%)
- 2008: 16% (HSS: 16%, INS: 0%, ISS: 0%, NVS: 0%)
- 2009: 10% (HSS: 10%, INS: 0%, ISS: 0%, NVS: 0%)
- 2010: 9% (HSS: 9%, INS: 0%, ISS: 0%, NVS: 0%)

**Disbursements**

- 2001: 0.0 (HSS: 0.0, INS: 0.0, ISS: 0.0, NVS: 0.0)
- 2002: 1.4 (HSS: 1.4, INS: 0.0, ISS: 0.0, NVS: 0.0)
- 2003: 0.7 (HSS: 0.7, INS: 0.0, ISS: 0.0, NVS: 0.0)
- 2004: 5.4 (HSS: 5.4, INS: 0.0, ISS: 0.0, NVS: 0.0)
- 2005: 26.6 (HSS: 26.6, INS: 0.0, ISS: 0.0, NVS: 0.0)
- 2006: 1.4 (HSS: 1.4, INS: 0.0, ISS: 0.0, NVS: 0.0)
- 2007: 0.7 (HSS: 0.7, INS: 0.0, ISS: 0.0, NVS: 0.0)
- 2008: 5.4 (HSS: 5.4, INS: 0.0, ISS: 0.0, NVS: 0.0)
- 2009: 0.7 (HSS: 0.7, INS: 0.0, ISS: 0.0, NVS: 0.0)
- 2010: 4.8 (HSS: 4.8, INS: 0.0, ISS: 0.0, NVS: 0.0)
5. **Assessment of GAVI Health Systems Strengthening Support (SG 1)**

GAVI’s first goal (Strategic Goal 1 – SG1) is to contribute to strengthening the capacity of country health systems to deliver immunisation and other health services in a sustainable manner. This goal covers the following GAVI programs: Health System Strengthening (HSS), Immunisation Services Support (ISS), Injection Safety Support (INS), and Civil Society Organisations (CSO).

This section provides a description of the support received from GAVI as well as an assessment of the results and value add, for the programs relevant for Mali.

5.1. **Assessment of GAVI INS support**

Mali was one of the GAVI-eligible countries that received INS support in Phase I. In-kind support for AD syringes and safety boxes was provided over the period 2004-06. The total value of the support provided was $0.7m.

Figure 5.1 shows that all of the approved INS funds have been disbursed.

*Figure 5.1: GAVI INS: approvals and disbursements (US$m)*

5.1.1. **Description of INS application, approval and implementation process**

Mali submitted a proposal for INS support in 2001. There were no major issues highlighted during the field visit on the proposal application and approval process.

AD syringes are being used for routine immunisation and there was no major incident of stock outs, etc. reported at by stakeholders consulted during the field visit. However two issues have been highlighted: (i) a lack of sufficient storage capacity; and (ii) a problem of waste management.

5.1.2. **Results of INS support**
The Government of Mali developed a policy on the use of injection safety material in 2002, which was implemented through the GAVI INS support.

_Sustainability of usage and funding of safety kit_

The provision of AD syringes and related safety equipment through the GAVI INS support has led to their adoption for routine immunisation in Mali. A key impact of the GAVI INS support is seen in Mali’s continued use of AD syringes for routine immunisation.

Interviewees mentioned that there has been no real issue on the training of medical officers on the use of AD syringes. In addition, it was mentioned that the Malian population is increasingly aware of the merit of using AD syringes.

It was highlighted however in the field visit that there has been a problem with storage capacity for these AD syringes and safety boxes. There is a lack of sufficient storage units to hold this material. This was also highlighted the 2007 Annual Progress Report (APR) for Mali.

Post GAVI support, the Malian government has undertaken to fund AD syringes for routine immunisation. Interviewees did not indicate any aberration in the supply of AD syringes and safety boxes with government funding, implying that the government has been committed to ensure their continued use in the country.

It is noted that the government funds this safety equipment for the traditional vaccines only, while GAVI continues to provide this equipment for yellow fever and pentavalent vaccine through its bundled support approach.

_Safe disposal/ waste management_

As noted above, waste management continues to be a problem in Mali. It was highlighted in the field visit that Mali does not have enough incinerators for waste management. In addition, Mali’s APR for 2007 also notes some problems regarding the poor quality of the incinerators.

This is important in terms of the broader implications of GAVI support on Mali – it is clear that at present Mali does not have the sufficient capacity to ensure safe disposal of its injection wastes, however with the planned introduction on pneumococcal vaccine in 2010, this will only add to the existing burden on waste management.

5.1.3. **Value add of GAVI INS support**

_Safety practices in broader country health systems other than immunisation_

An important area of the value addition of GAVI INS support is noted in terms of its catalytic role in encouraging the widespread adoption of AD syringes and safety boxes in other health sectors such as curative health, etc. Interviewees informed us that AD syringes and safety boxes are being used in both the public and private sectors, with the latter being an important provider of curative health support.

In terms of attribution, interviewees noted that while GAVI INS was not responsible for this entirely, it has played an important catalytic role in supporting this wider adoption of AD syringes and safety boxes.
5.2. **Assessment of GAVI HSS support**

A total of $4.8m has been approved for Mali for HSS support, over the period 2008-10. Of this, $1.4m was disbursed in 2008 and there have been no disbursements in 2009.

Figure 5.2 presents GAVI approvals and disbursements for HSS.

*Figure 5.2: HSS - GAVI approvals and disbursements data ($m)*

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5.2.1. **Description of HSS application, approval and implementation process**

Mali’s application for HSS funding was approved in 2008 (following a round of clarifications\(^{12}\)), and the first tranche of money was disbursed in September 2008.

We understand that there was some miscommunication between the government departments (the Ministry of Finance (MOF), which receives the funds, and the Planning Department, which is in charge of implementing the funds) as a result of which the funds disbursed from GAVI were not used. The Planning Department explained to us during the field visit that they were not aware of the arrival of funds until early 2009, as a result of which there has been a delayed implementation of HSS in Mali.

Given this delay, the funds for 2009 have not been disbursed by GAVI as of now – however we understand from the Secretariat that this will be disbursed soon.

The Planning Department has requested that GAVI notify them as well when they are disbursing money to avoid such unanticipated delays in implementation.

It was noted by country government officials that they were used to dealing with GAVI for EPI (and correspondingly through the immunisation department), however the HSS support is now placed within the Planning Department – which is viewed as a ‘new way of doing business’ in the country. We understand that the Planning Department has not previously been involved in implementing grants for health systems strengthening.

\(^{12}\) Based on the data provided from GAVI: ‘Recommendations of IRC New Proposal Reviews from 2005 to 2009 (Nov 2009)’
5.2.1. Results of HSS support

The HSS proposal for GAVI support is an integral part of the implementation of the Health and Social Development Program (PRODESS) II, the second five-year section of the country’s ten-year Health and Social Development Plan (PDSS). The proposal covers all health districts throughout the 8 regions of Mali and the district of Bamako. The overall goal of the HSS support, as noted in the proposal, is to obtain a health system that is efficient, accessible and equitable for all.

GAVI HSS support to Mali covers five of the seven priority areas of PRODESS:

- Development of human resources;
- Reinforcing quality of health services;
- Reinforcing institutional capacities and decentralisation;
- Reinforcing monitoring and evaluation systems; and
- Operational health research.

Given the delays in the use of funds by the government, it is still too early to report on the impact of HSS in Mali. Expected results, as noted in the proposal itself, are enhanced vaccination cover, improved quality of supply of healthcare services and increased take-up of services in all targeted areas.

Discussions during the field visit highlighted that one of the areas being funded through the GAVI HSS support include providing support for sending physicians to the district level. This is regarded as a key constraint that was not being funded previously, and will help improve access to health care for the population.

5.2.2. HSS value add

GAVI HSS support in Mali has a high degree of ‘visibility’ amongst the government, given that it provides dedicated funding for strengthening health systems, which is not linked to any particular health sub-sector or region, and is fully implemented through the existing government institutional structures. Other donors are also providing support for health system strengthening in Mali, however, these do not share the same attractiveness as GAVI HSS support for a number of reasons:

- The World Bank provides general health sector budget support. While the quantum of this support is much larger than that provided by GAVI, as it is merged with general government funding of health systems, it does not have the same visibility as GAVI HSS funding for the government.
- Global Fund health system strengthening support is provided through its disease-focused support, and is not cross-cutting like the GAVI HSS support.
- USAID’s support for health systems in Mali is managed/ delivered through a privately appointed contractor (John Snow, Inc., JSI) and the funding is not provided directly to the government.
• Other bilaterals active in Mali (for example, the French, Canadians, etc) support specific sub-regions within Mali.

These points of comparison are not to suggest that GAVI HSS funding is preferred/ better than these other forms of support. Instead, it only highlights why GAVI HSS is particularly appealing to the government.

Feedback from stakeholders seems to suggest that the main value addition of GAVI’s support to Mali for HSS has been by virtue of its approach of working through existing government structures and plans, as against developing a parallel system of support. GAVI’s approach has been closely aligned with the country plans and implemented through the government structures, and as a result GAVI has been quick to support Mali in HSS as against other donors.

Government interviewees indicated that GAVI HSS funding has contributed towards making the country think more strategically about HSS and the need to attract more donor funding. For example, GAVI HSS funding has led to the Government reviewing the role of different partners in the health system, so as to determine the areas where GAVI can provide support. Their view is that given this start with GAVI HSS support, they are now more prepared to access additional donor funding for HSS.

5.3. Assessment of GAVI ISS support

Figure 5.3 presents the yearly approvals and disbursements for GAVI ISS support to Mali. The total amount approved/ disbursed over the period is $5.4m.

Figure 5.3: ISS - GAVI approvals and disbursements data ($m)

![Graph showing ISS approvals and disbursements]

5.3.1. Description of ISS application, approval and implementation process

Mali was approved for ISS funding in 2001, and after two years of investment funding qualified for ISS reward funding. However, problems with data quality have impacted Mali’s access to rewards in subsequent years. A Data Quality Audit (DQA) was conducted in 2002, where the
verification factor\textsuperscript{13} was found to be 0.75, and hence the EPI system of the country was classified as “unreliable”. Persistent data quality problems led to the termination of ISS funding in 2007, when the last disbursement of rewards was made. At present, there continues to be a big discrepancy between the administrative coverage rates and those estimated by WHO/ UNICEF (as mentioned in Section 3 above).

There is however an unspent balance of about $1m of ISS funds in Mali since 2007. There appears to be some confusion amongst the Malian government as to whether they are allowed to use these funds or not. According to the Government, they are awaiting confirmation from GAVI on the use of this unspent balance. While GAVI does not have any restrictions on the use of disbursed ISS funds, this has not been communicated effectively to Mali – resulting in the unspent balance sitting in the accounts for over two years now. At the same time, the activities that were previously funded by ISS have not received funding from any other source. Feedback during the country visit suggested that this is negatively impacting immunisation systems, with the related impact on coverage.

\subsection*{5.3.2. Results of ISS support}

This section reports on the results of the ISS support, in terms of providing some details on how the funds have been used and the impact on the DTP3 coverage rate, as well as feedback from country stakeholders on the key features of the ISS support i.e. the flexible use of funds and the reward based approach. The impact of the DQA is also discussed.

\textit{Use of ISS funds}\textsuperscript{14}

Figure 5.4 provides details on the use of ISS funds over the years. As can be seen from the figure:

- Most of the ISS funding has been used for recurrent expenditure to date such as injection supplies, personnel, transportation, maintenance and overheads, training, Information, Education and Communication (IEC), mobilisation, etc.
- There has been some capital expenditure, particularly in 2002, for vehicles, cold chain, monitoring and evaluation, computers, etc.

\textsuperscript{13} The verification factor is the ratio of the recounted number of infants from the primary data source (records) and the number reported as receiving DTP3 in the monthly summary reports from all health units visited during the DQA. The GAVI recommended level for VF is 0.80.

\textsuperscript{14} The source of the information presented in this section is the APRs.
While the ISS areas funded and the associated expenditures varied across years, Figure 5.5 below presents this information for the year 2006 as an indication of the allocation of expenditure. In 2006, a total of US$0.8m was spent on various areas of ISS. Close to 80% of this amount was spent at the district level, 14% at the central level, and the remaining at the state level. The two highest areas of funding are outreach (campaign against yellow fever) and vehicles.

Figure 5.6: ISS spending by areas of expenditure, 2006

**Impact on the DTP3 coverage rate**

Figure 5.6 shows DTP3 coverage has increased over the period of ISS funding. While this is not sufficient information to establish attribution, the correlation in the trend of the two variables is noted.

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15 No ISS funds were spent in 2008. The ISS spending in 2007 was only in the area of training.

16 Please note that we have used the WHO-UNICEF estimates given the problems with the administrative coverage rate.
It is also interesting to note that from 2005 onwards, the coverage rate appears to have been mostly constant. This appears to link up with the reduced use of the ISS funds. Also it supports the view that beyond a certain coverage rate, ISS funding has limited impact – although we cannot conclude on this firmly based on this data alone.

We do not have data on the coverage rate after 2007, but feedback during the country visit suggested that lack of ISS spending has negatively impacted the immunisation system and therefore the coverage rate.

Figure 5.6: Approved GAVI ISS funds and DTP3 coverage rates, 2001-07

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Features of the ISS approach: flexibility and rewards-based approach

Key views/ conclusions on the ISS approach include the following:

- Country stakeholders view the flexibility of ISS funding as important in allowing the country itself to decide where the funds are allocated. However linked to this is the ability of the Government to plan and spend the money effectively. Data from the APRs suggest that more than 20% of the funds disbursed to Mali in 2006 were not utilised.

- The reward based approach was also viewed as useful. However given that Mali has had big inconsistencies between the administrative and survey data, access to rewards based on the coverage rates has been an issue. There were suggestions that Mali has faced perverse incentives in showing a higher coverage rate to secure access to ISS funds.

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17 Figures sourced from "CEPA - GAVI Phase I & II consolidated approvals & disbursements" spreadsheet, received from the GAVI Secretariat. DTP3 coverage rates presented in the figure are WHO/UNICEF estimates.
Another issue with the rewards based approach highlighted in the field visit was that reward based element was not transferred to the district level.

### 5.3.3. GAVI ISS value add

Our view on the key value addition of GAVI ISS in Mali, based on the feedback provided by the stakeholders, is as follows:

- GAVI ISS funding has helped strengthen the immunisation system, with concomitant impacts on coverage. We understand that ISS funding was first employed in one of the lowest coverage regions in Mali – Mopti – and has hence helped strengthen immunisation systems in much needed areas. Based on the views expressed by different stakeholders, it is our conclusion that in the absence of GAVI ISS funding, Mali’s immunisation systems would not have received the focus that it has received through the support.

- While the data quality issue has plagued Mali and limited its access to ISS funds, GAVI’s approach (through its DQA, requirement of proper data for approval of reward funding, etc.) has led to greater attention being paid to the data quality issue in Mali. We understand that at present the Malian government is looking to improve its data – something the country may not have delved into in the absence of this issue raised by GAVI on the data quality.18

### 5.4. GAVI CSO support

Mali has not applied for GAVI Type A Civil Society Organisation (CSO) support, and is not one of the pilot countries eligible for Type B support.

Consultations with government representatives during the visit suggested that they have communicated information about GAVI’s CSO window of support to these organisations, however they have not professed any interest and hence Mali has not applied for Type A support. However there was a mixed picture presented by the two key CSO bodies that we consulted with during the visit. While one of them confirmed that the government had shared information with them, the other indicated that they happened to hear of the support during a visit by the GAVI Country Representative Officer (CRO) in Mali.

We understand that the CSOs are now looking to apply for Type A support. However there appears to be some misunderstanding on the exact nature/ scope of the Type A support. Discussions with the CSO implied that they were planning to revise their unsuccessful proposal to the EU and submit to GAVI. However the proposal to the EU was for funding for their activities (as against the CSO mapping focus of the Type A support).

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18 In addition to the problem of the numerator, the denominator was also an issue as 1998 census data was being extrapolated. We understand that a new census has been conducted last year and revised data from this census will soon be available.
When asked about their views on a comparison of the GAVI CSO window to other donor support (the main experience of other donors has been the EU and USAID), the main points of feedback were as follows:

- As against other donors, GAVI support is meant to be routed through the government, which is not viewed as ideal by the CSOs.

- Other forms of donor support come with a larger budget and were not fixed in amount – however this perception may be a bit marred given that they were not clear on the scope of the GAVI Type A support and hence the limited budget.
6. **Assessment of GAVI Vaccine Support to Mali (SG 2)**

GAVI’s second strategic goal (SG2) is to: ‘accelerate the uptake and use of underused and new vaccines and associated technologies and improve vaccine supply security’.

This section provides a description of the vaccine support received by Mali as well as an assessment of the results and value add.

Mali has been receiving NVS support from GAVI since 2002. Total support worth $80.5m has been approved between 2002 and 2015 for the yellow fever, HepB, pentavalent and pneumococcal vaccines. Support for pneumococcal from 2010 is yet to be disbursed.

Figure 6.1 shows approvals and disbursements made under this window across the years of support.

*Figure 6.1: NVS - GAVI approvals and disbursements data ($m)*

6.1. **Assessment of GAVI vaccine support**

6.1.1. **Description of application, approval and implementation process**

No major issues were highlighted by country-level stakeholders on the application process, timeframe and process for approval, and the availability/supply of the vaccines. It was also indicated that Mali had received support from Japan at the start of the century for vaccine infrastructure (cold chain, storage) and hence this was not an issue either.

However, we understand that recently there have been some stock outs for the traditional and new vaccines in Mali. It was suggested that the government does not have sufficient funds to meet its demand for traditional vaccines as well as its co-financing requirement for the GAVI vaccines. This is discussed in more detail in Section 7 below.
6.1.2. Results and value add of GAVI NVS support

GAVI’s support through NVS has helped diversify the antigens covered under Mali’s immunisation schedule. With the planned introduction of pneumococcal in 2010, a total of 10 antigens will be covered under Mali’s immunisation program.

GAVI’s support for the yellow fever vaccine has been the longest running vaccine support. WHO officials informed us during the visit that this has contributed to the eradication of yellow fever in the country.

GAVI funding has also played an important role in Mali’s adoption of HepB and Hib (through the pentavalent vaccine) – both by providing support to the country to help make the decision to adopt the vaccines (through the work of the partners) and of course through its funding support.
7. **Sustainability of GAVI Funding at the Country Level (SG 3)**

GAVI’s third goal relates to financing of its programs, and is to ‘increase the predictability and sustainability of long-term financing for national immunisation programs’.

The focus of the country-level evaluation is to analyse to what extent GAVI has promoted and increased the sustainability of immunisation funding in the country. This section reports on the feedback provided by country-level stakeholders. First however we provide a brief context based on the information contained in the cMYP.

7.1. **Mali’s comprehensive Multi-Year Plan (cMYP), 2007-11**

The total cost of the cMYP for the period 2007-11 is $119.3m, with the annual cost being represented in Figure 7.1.

*Figure 7.1: Annual cost of Mali’s cMYP*

Of the total costs, close to 66% are recurrent (e.g. traditional and new vaccines, injection supplies, personnel etc), 5.4% are capital costs (e.g. cold chain equipment), 17% are immunisation costs (supplementary immunisation activities against meningitis), and the remaining are shared costs (personnel, transportation etc).

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19 Mali’s cMYP has been prepared by the Ministry of Health and the Ministry of Economy and Finance, as well as technical and financial partners, and covers the period 2007-11. The Plan is in line with the sector policy, strategy document for growth and poverty reduction, medium-term cost framework, medium-term budgetary framework, and the 2006-15 Global Immunisation Vision and Strategy (GIVS). The Plan identifies key problems and lays down targets, strategies and activities in four main areas: services; supply and quality of vaccines and logistics; integrated surveillance of diseases targeted by the Expanded Program on Immunisation (EPI); and communications. The Plan also presents an analysis of costs and program financing for the period, and strategies for mobilisation of additional resources and more effective management of available resources.
The financial shortfall during the period of the plan is $22.2m (19%), taking into account secure and probable financing. The financiers of the Plan include the government (63.2%), GAVI (32.6%) and UNICEF (1.8%). Others include WHO, USAID, World Bank, European Union, Netherlands, Canada, etc. Figure 7.2 presents trends in financing by the government, GAVI and other donors. GAVI's share in total secure and probable funding fluctuated between 45% to 60% during 2007 and 2010, and is likely to be close to 38% in 2011.

Figure 7.2: Sources of financing, 2007-11

7.2. Stakeholder views on the sustainability of GAVI funding

Feedback from stakeholders suggests that financial sustainability of GAVI support differs by program:

- In the case of vaccine support, the government clearly indicated that: (i) in the absence of GAVI support, the government would not be able to afford access to these new vaccines; and (ii) were GAVI funding be terminated, given current price levels, the government does not have the financial capacity to continue funding its requirements for the new vaccines.

- For ISS funding, as mentioned in Section 5 above, with the termination of GAVI support in 2007, there has been no replacement funding. In part this may be due to the Malian government waiting for clarification from GAVI on whether they are entitled to use the unspent balance available, but it is noted that around two years have passed since the funds have not been utilised.

- In the case of INS support however, the Government has been committed to sustaining the use of AD syringes and safety boxes, and has thus continued to fund their purchase.

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20 Amounts presented in the figure include both secure and probable funding.

Implications of the co-financing policy

The new vaccines support through GAVI is very attractive to the Malian government, and it is committed to sustain this support from GAVI by meeting the co-financing requirements. Government stakeholders viewed the co-financing policy as important and some noted that it had in fact encouraged the government to think more closely about the issue of sustainability.

We understand that Mali has fulfilled its requirement for co-financing for yellow fever in 2008 (based on consultations and APR data). This is supported by the government priority for increasing resources to the health sector. Discussions with the concerned officials in the Government suggest the funds represent additional resources for vaccine purchase, as against displaced resources from other areas. While strictly speaking it is not possible to confirm this as money is fungible, it is important to note that health and education represent the two priority sectors for the government. 22

However, discussions during the field visit suggest that the country is currently experiencing a stock out in some traditional vaccines and has not yet procured its co-financing requirement for 2009. As explained to us at the visit, the country has faced a shortage of funds to purchase the package of vaccines that it needs to procure (i.e. both traditional vaccines and the co-financing proportion for the yellow fever vaccine), and going forward, given that the co-financing amounts will only increase, it can be expected that there will be further stock outs.

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22 We understand that the government commitment to improving health in Mali is exhibited through increases in the total budget for health of about 5-6% each year. Education is also accorded priority by the government, with planned increased in the allocated resources each year.
8. **GAVI’s Structures and Processes in Mali (SG 4)**

This section describes the GAVI institutional structures in Mali and the role of technical partners in proposal development and grant implementation. There is also a discussion of the key strengths and weaknesses of the structures and processes, and the working of GAVI’s Alliance model at the country level.

8.1. **Institutional structures**

There was mixed feedback from country stakeholders on the effectiveness of the two key institutional structures supporting GAVI programs in the country: the Inter-agency Coordination Committee (ICC) for immunisation, and the committee for health systems strengthening (the equivalent of the Health Sector Coordination Committee, HSCC):

- With regards the ICC, it was indicated that prior to GAVI, it functioned in a very informal/loose manner, however with the advent of GAVI support, the committee operates more formally now. However some of the GAVI partners indicated that the committee does not meet very often and is hence not very effective. The Technical Sub Committee within the ICC is however very active.

- The HSCC equivalent body was viewed as effective by the country stakeholders. There was however some indication of CSO participation on this committee not being satisfactory.

8.2. **Stakeholder views on the ‘Alliance’ model at the country level**

Feedback from country stakeholders on the role of GAVI partners, especially WHO and UNICEF was very positive. Government stakeholders expressed their keen involvement in GAVI-related activities and discussions with GAVI partners suggested the same.

However apart from the technical support that these partners provide there is a general issue of the lack of sufficient information on GAVI’s processes and requirements, as well as lack of timely information from GAVI on disbursements and follow-up. Some stakeholders suggested that it would be useful if GAVI had some representation in Mali so that these issues could be dealt with more smoothly.

8.3. **Country level advocacy**

The provision of support from GAVI to Mali has helped raise the profile of immunisation in the government. It was noted by a number of country stakeholders that immunisation is more of a priority today in the national policy agenda, with GAVI contributing significantly to this improved advocacy through its provision of funding.
9. **CONCLUSIONS**

This section brings together the findings on results and value add across GAVI programs in Mali. Table 9.1 below consolidates the evidence from our analysis on areas where GAVI has demonstrated relatively better or weaker performance across its four Strategic Goals.

*Table 9.1: Performance of GAVI programs in Mali*

<table>
<thead>
<tr>
<th>Strategic Goal</th>
<th>Positive results/value add</th>
<th>Weaker results/value add</th>
</tr>
</thead>
</table>
| SG1: Health system strengthening | • INS has led to the adoption of AD syringes and safety boxes in Mali for routine immunisation, with the government providing funding for their purchase after the completion of GAVI support.  
• INS funding has had a catalytic effect in encouraging safety equipment use in other sectors as well.  
• Immunisation systems would not have received the attention/funding that they did, if not for GAVI ISS support.  
• Problems with poor data quality have received attention in Mali as a fall out of the requirement of ISS reward funding to be based on reliable data.  
• GAVI HSS funding has improved strategic planning by the government on health system strengthening and the need to attract greater donor funding. | • Waste management of injection safety material continues to be an issue – and this will only get further aggravated with GAVI pneumococcal support.  
• Some issues with limited storage capacity for injection safety materials was also highlighted.  
• Termination of GAVI ISS support has not led to any replacement funding, with a concomitant impact on immunisation systems and coverage levels.  
• Poor communication from GAVI has led to an unspent balance of almost $1m of ISS funds still not being used by the country. |
| SG2: Vaccine support | • Successful introduction and adoption of yellow fever, Hep B and Hib vaccines. | |
| SG3: Financing | • Malian government is committed to the new vaccine support and hence determined to fulfil its requirement for co-financing. | • Recent stock outs and feedback from the government suggest that lack of sufficient funding may impact their ability to meet their co-financing requirements going forward as well as impact the available funding for the traditional vaccines. |
| SG4: Added value as a global Public Private Partnership (PPP) | • Effective technical sub-committees for both the ICC and HPCC equivalent body. | • Weak communication from the GAVI Secretariat to the government.  
• Poorly functioning ICC in terms of regularity of meetings, donor coordination, etc. |
ANNEX 1: KEY HEALTH AND IMMUNISATION STATISTICS

Table A.1: Demographic statistics, 1998 census

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy at birth (male)</td>
<td>48.4 years</td>
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<tr>
<td>Life expectancy at birth (female)</td>
<td>49.7 years</td>
</tr>
<tr>
<td>Proportion of population &lt; 15 years</td>
<td>48%</td>
</tr>
<tr>
<td>Proportion of female population</td>
<td>51.2%</td>
</tr>
<tr>
<td>Women in child bearing age (15-49 years)</td>
<td>21.1% of total population</td>
</tr>
</tbody>
</table>

Source: 1998 Census

Table A.2: Mali Key Health Indicators from the DHS: 1996, 2001 and 2006

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1996</th>
<th>2001</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG coverage rate (%)</td>
<td>80</td>
<td>69</td>
<td>77</td>
</tr>
<tr>
<td>DTP3 coverage rate (%)</td>
<td>38</td>
<td>40</td>
<td>68</td>
</tr>
<tr>
<td>Fully-immunized rate (%)</td>
<td>32</td>
<td>29</td>
<td>48</td>
</tr>
<tr>
<td>Infant mortality rate per 1,000 births</td>
<td>123</td>
<td>113</td>
<td>96</td>
</tr>
<tr>
<td>Under 5 mortality rate per 1,000 births</td>
<td>238</td>
<td>229</td>
<td>191</td>
</tr>
<tr>
<td>Maternal mortality rate per 100,000 births</td>
<td>577</td>
<td>505</td>
<td>464</td>
</tr>
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</table>
Table A.3: Mali immunisation financing (Source: Ministry of Health)

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
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<th>2007</th>
<th>2008</th>
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<tr>
<td><strong>Mali (State)</strong></td>
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<td></td>
</tr>
<tr>
<td>Total Budget (TB)</td>
<td>534,968,000</td>
<td>587,899,000</td>
<td>679,330,000</td>
<td>737,552,000</td>
<td>787,190,000</td>
<td>836,231,000</td>
<td>935,759,000</td>
<td>976,602,000</td>
<td>1,014,385,000</td>
<td>1,001,800,338</td>
<td>1,196,129,000</td>
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<td>Health Budget (HB)</td>
<td>34,580,007</td>
<td>36,943,517</td>
<td>39,577,529</td>
<td>51,322,941</td>
<td>51,834,459</td>
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<td>66,055,486</td>
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<td>67,760,179</td>
<td>51,282,784</td>
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<td>Immunisation Budget (IB)</td>
<td>850,731</td>
<td>976,000</td>
<td>984,000</td>
<td>1,150,000</td>
<td>1,285,000</td>
<td>1,214,000</td>
<td>1,269,515</td>
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<td>1,829,955</td>
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<td>3,330,066</td>
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<td><strong>Development partners</strong></td>
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<td></td>
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<tr>
<td>WHO</td>
<td>192,000</td>
<td>1,612,000</td>
<td>120,000</td>
<td>1,012,000</td>
<td>1,303,000</td>
<td>n/a</td>
<td>46,319</td>
<td>161,916</td>
<td>417,250</td>
<td>487,740</td>
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<td>GAVI</td>
<td>1,301,000</td>
<td>1,097,000</td>
<td>744,000</td>
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<td>2,532,000</td>
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<td>4,633,810</td>
<td>3,854,096</td>
<td>5,602,335</td>
<td>13,262,968</td>
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<td>UNICEF</td>
<td>1,133,000</td>
<td>1,020,000</td>
<td>353,000</td>
<td>1,058,000</td>
<td>1,658,000</td>
<td>n/a</td>
<td>770,507</td>
<td>502,638</td>
<td>760,698</td>
<td>342,518</td>
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<td>USAID</td>
<td>44,000</td>
<td>n/a</td>
<td>56,531</td>
<td>65,000</td>
<td>n/a</td>
<td>35,000</td>
<td>87,500</td>
<td></td>
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<tr>
<td>Japan</td>
<td>n/a</td>
<td>192,000</td>
<td>-</td>
<td>500,000</td>
<td>200,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Others</td>
<td>655,000</td>
<td>645,000</td>
<td>1,541,000</td>
<td>1,310,000</td>
<td>1,978,000</td>
<td>n/a</td>
<td>310,750</td>
<td>62,500</td>
<td>270,320</td>
<td>324,085</td>
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<tr>
<td><strong>Metrics for comparison</strong></td>
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</tr>
<tr>
<td>State immunisation budget as a % of health budget</td>
<td>2.5%</td>
<td>2.6%</td>
<td>2.5%</td>
<td>2.2%</td>
<td>2.5%</td>
<td>2.2%</td>
<td>3.0%</td>
<td>3.0%</td>
<td>2.7%</td>
<td>3.5%</td>
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<td>State immunisation budget as a % of total budget</td>
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<td>0.2%</td>
<td>0.2%</td>
<td>0.1%</td>
<td>0.2%</td>
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<tr>
<td>State health budget as a % of total budget</td>
<td>6.5%</td>
<td>6.3%</td>
<td>5.8%</td>
<td>7.0%</td>
<td>6.6%</td>
<td>6.6%</td>
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<td>6.7%</td>
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<td>WHO funding as a % of State immunisation budget</td>
<td>19.7%</td>
<td>163.8%</td>
<td>10.4%</td>
<td>78.8%</td>
<td>107.3%</td>
<td>n/a</td>
<td>2.6%</td>
<td>8.8%</td>
<td>23.3%</td>
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<tr>
<td>GAVI funding as a % of State immunisation budget</td>
<td>133.3%</td>
<td>111.5%</td>
<td>64.7%</td>
<td>84.1%</td>
<td>208.6%</td>
<td>262.8%</td>
<td>210.6%</td>
<td>312.7%</td>
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<td>UNICEF funding as a % of State immunisation budget</td>
<td>116.1%</td>
<td>103.7%</td>
<td>30.7%</td>
<td>82.3%</td>
<td>136.6%</td>
<td>43.7%</td>
<td>27.5%</td>
<td>42.5%</td>
<td>10.3%</td>
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<tr>
<td>USAID funding as a % of State immunisation budget</td>
<td>3.8%</td>
<td>3.2%</td>
<td>3.6%</td>
<td>2.0%</td>
<td>2.0%</td>
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<tr>
<td>Japan funding as a % of State immunisation budget</td>
<td>10.9%</td>
<td>27.9%</td>
<td>6.0%</td>
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<td>Others’ funding as a % of State immunisation budget</td>
<td>67.1%</td>
<td>65.5%</td>
<td>134.0%</td>
<td>101.9%</td>
<td>162.9%</td>
<td>17.6%</td>
<td>3.4%</td>
<td>15.1%</td>
<td>9.7%</td>
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</tbody>
</table>
ANNEX 2: BIBLIOGRAPHY

2. Health Financial Department: Reports from 2000 to 2010
4. Ministry of Health: Demographic and Health Survey (Enquête Démographique et Sanitaire II = EDS II – 1996)
5. Ministry of Health: Demographic and Health Survey (Enquête Démographique et Sanitaire III = EDS III – 2001)
6. Ministry of Health: Demographic and Health Survey (Enquête Démographique et Sanitaire IV = EDS IV – 2006)
### ANNEX 3: CONSULTATIONS LIST

*Table A4: Interview List – GAVI visit in Mali 27-29 April 2010*

<table>
<thead>
<tr>
<th>Institution</th>
<th>Name</th>
<th>Function</th>
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<tr>
<td>National Center for Immunization</td>
<td>Doctor Nouboum Kone</td>
<td>Manager of section</td>
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<tr>
<td></td>
<td>Doctor Zangoura Coulibaly</td>
<td>Logisticien</td>
</tr>
<tr>
<td>Unit of statistic and planning in health</td>
<td>Doctor Fodé Boundi</td>
<td>Deputy Director</td>
</tr>
<tr>
<td></td>
<td>Doctor Aboubacrine Maiga</td>
<td>Focal Point HSS / GAVI</td>
</tr>
<tr>
<td>Administrative and Financial Department</td>
<td>Monsieur Souleymane Traore</td>
<td>Deputy Director</td>
</tr>
<tr>
<td></td>
<td>Monsieur Chaka Bagayoko</td>
<td>Manager of finances section</td>
</tr>
<tr>
<td></td>
<td>Monsieur Amadou Doumbia</td>
<td>Manager of equipments section</td>
</tr>
<tr>
<td></td>
<td>Madame Faïnké Alima Doiumba</td>
<td>Chief accountant</td>
</tr>
<tr>
<td>WHO</td>
<td>Doctor Modjirom N'Doutabe</td>
<td>Adviser in EPI</td>
</tr>
<tr>
<td></td>
<td>Doctor Sarmoye Cisse</td>
<td>Adviser in Family Health</td>
</tr>
<tr>
<td></td>
<td>Doctor Moussa Keita</td>
<td>Adviser in Health Economy</td>
</tr>
<tr>
<td></td>
<td>Doctor Massambou Sacko</td>
<td>Adviser in fighting against disease</td>
</tr>
<tr>
<td>UNICEF</td>
<td>Doctor Dougoufana Bagayoko</td>
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<tr>
<td></td>
<td>Doctor Etienne Dembele</td>
<td>Focal Point EPI</td>
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<td></td>
<td>Tiécoura Sidibe</td>
<td>Health Politic Economist in Health</td>
</tr>
<tr>
<td>National Federation of Association of Community Health Centers</td>
<td>Monsieur Yaya Zan Konare</td>
<td>President</td>
</tr>
<tr>
<td></td>
<td>Monsieur Sidi Bécaye Doumbia</td>
<td>General Secretary</td>
</tr>
<tr>
<td></td>
<td>Monsieur Baba Sangare</td>
<td>Treasurer</td>
</tr>
<tr>
<td></td>
<td>Monsieur Bakary Keita</td>
<td>President of the supervisory committee</td>
</tr>
<tr>
<td></td>
<td>Monsieur Sidi Oumar Toure</td>
<td>Coordinator of GAVI Program</td>
</tr>
<tr>
<td>Groupe Pivot/NGO consortium in Health and Population</td>
<td>Doctor Souleymane Dolo</td>
<td>Executive Director</td>
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<td>Alfousséni Sangare</td>
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<tr>
<td>Health Program USAID</td>
<td>Madame Lisa Nichols</td>
<td>Executive director</td>
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<tr>
<td></td>
<td>Doctor Ibrahim Dolo</td>
<td>Adviser in vaccination</td>
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<td>Monsieur Cheick H. T. Simpara</td>
<td>Deputy Director, Expert in Institutional Strengthen</td>
</tr>
<tr>
<td>Canadian Cooperation</td>
<td>Monsieur Amadou Bengaly</td>
<td>Adviser in finance</td>
</tr>
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<td>Monsieur Amadou Tolo</td>
<td>Adviser in Development</td>
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<td>French Cooperation</td>
<td>Doctor Michel Marquis</td>
<td>Adviser in Health, in Mali, Burkina Faso, Niger</td>
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<tr>
<td>World Bank</td>
<td>Ousmane Haïdara</td>
<td>Manager in heath department</td>
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