SIS-MA – Health Information System for Monitoring and Evaluation

Progress Report
August 2014

Program Area:
Strategic Information – Strengthening Health Information Systems Implementation, capacity and infrastructure in the Republic of Mozambique under the Presidents Emergency Plan for AIDS Relief (PEPFAR)

Cooperative Agreement PS10-1086: Strengthening Health Information Systems Implementation, Capacity, and Infrastructure in the Republic of Mozambique under the President's Emergency Plan for AIDS Relief (PEPFAR)

Partner:
Jembi Health Systems – MOASIS (Universidade Eduardo Mondlane)

Jembi Health Systems
August 2014
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I. INTRODUCTION
The Health Information System of Mozambique for Monitoring and Evaluation, named with the acronym SIS-MA, aims to support the collection, analysis, interpretation and continuous systematic dissemination of health data that are used for defining and monitoring the public health policy. Data are collected from all districts of Mozambique to the capital through the provinces according to the hierarchical organization of the organic structure of the Ministry of Health of Mozambique.

The SIS-MA collects data efficiently, both operational and epidemiological, providing timely quality information and analysis that enable system managers to monitor efficiently and effectively:

- The state and the impact of health programs;
- Productivity;
- The use and availability of resources;
- The epidemiological profile of the population and its evolution;
- The impact of health policies and actions.

SIS-MA also provides information that allows allocating resources among the different existing programs and identifying operational and structural problems that require management resolutions.

The initial work began in 2012 with an invitation for expressions of interest for companies, organizations and institutions with the capacity to implement it. In late 2012 the final report was presented. Finally MOH, together with Jembi and MOASIS chose the winner of the final tender.

The year 2013 begins with negotiations with the tender's winner, in order to adjust the proposal in relation to the obligations with funders and institutions and finally start operations.

The operational works were initially divided into eight phases. Successively, for budgetary reasons, we excluded the last phase of maintenance and support, moreover training and implementation phases were joined in a single phase.

It resulted in six phases as follows:

1) Study
2) Proposal of software development and methodology
3) Design of the application
4) Software Development  
5) Installation and testing  
6) Training and Implementation

The program is currently in phase number 5. Public information about the work is always available through the official site at the address [http://sis-ma.in](http://sis-ma.in)

The program produced documents at the end of each phase.

### II. PROJECT PHASES

#### PHASE 1: STUDY

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<th>Current status, barriers and solutions</th>
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**A. Current status:** CONCLUDED

**B. Barriers:**
- Limited time for a wide analysis

**C. Solutions:**
- External consultant was contracted

**D. Need for assistance:** No

#### PHASE 2: PROPOSAL OF SOFTWARE DEVELOPMENT AND METHODOLOGY

<table>
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<th>Current status, barriers and solutions</th>
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**A. Current status:** CONCLUDED

**B. Barriers:** None

**C. Solutions:** N/A

**D. Need of assistance:** No
PHASE 3: APPLICATION DESIGN

Current status, barriers and solutions

A. **Current status:** CONCLUDED

B. **Barriers:**
   - High level tech documents, difficult reading for non tech people

C. **Solutions:**
   - Inclusion of all information, well explained, in the manuals to be produced during phase 5

D. **Need of assistance:** No

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PHASE 4: SOFTWARE DEVELOPMENT

Current status, barriers and solutions

A. **Current status:** CONCLUDED

B. **Barriers:**
   - Administrative territorial division of Mozambique modified by law
   - Organic territorial and hierarchical MOH structure modified.
   - Slow response time from MOH

A. **Solutions:**
   - Acquisition of information through different channels.
   - Update of existing information.
   - Postposition of activities to next phase.

B. **Need of assistance:** No

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PHASE 5: INSTALLATION AND TESTING

Current status, barriers and solutions

C. **Current status:** ONGOING

D. **Barriers:**
   - Lack of effective collaboration from MOH
   - Unilateral modification of the established program
Conflict of interests

C. Solutions:
- Use of additional resources
- Escalation of technical issues to a higher management level
- Escalation of technical issues to a higher management level

D. Need of assistance: Advocacy in order to solve existing conflict of interest

### PHASE 6: TRAINING AND IMPLEMENTATION

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<th>Current status</th>
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<td>A. Current status: NOT STARTED</td>
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III. ONGOING AND NEXT STEPS

Current phase 5 started on March 2014. This phase consists of the following activities:
- Setup of SIS-MA in the data-center MOH;
- Preliminary tests in the city of Maputo and the province of Gaza in order to validate the following cases:
  - Access and functional tests in a district online access;
  - Access and functional tests in a district of limited connectivity;
  - Access and functional tests in a district of offline access;
  - Access and functional tests in selected provinces;
  - Setup and training for field testing
  - Field tests

It was supposed to end in a maximum time of three months, but several hindrances occurred.

- Organic territorial and hierarchical MOH structure modified.
There was an unexpected need to allocate resources to create an updated facility list with the new hierarchic structure, this work cover all the territory of Mozambique and is still ongoing but close to its completion.

- MOH suspension of SIS-MA activities during June-July to analyze and assess the field test.
The SIS-MA operations suffered a slight delay during June-July due to the MOH decision to suspend the field test, during this time Jembi/MOASIS and Critical Software focused on the preparatory work to facilitate the next phase (Phase 6), this effort resulted with the completion of all manuals, as well as validation and publication in the official web site at the following address: [http://sis-ma.in/?page_id=962](http://sis-ma.in/?page_id=962)
The field test is currently ongoing after MOH’s decision to resume with the work, however slight
delays will be observed.

- Unexpected changes in some programs to be incorporated in SIS-MA.
  Some changes were proposed by the MOH in some health programs that were not included in the initial development plan and the validation by the MOH of the final approved list of programs was time consuming and causes a few delays. This change led to a slightly delay due to changes in the integration of health programs, customization, interface translation to Portuguese, error fixing, definition of training material, installation procedures and many other issues.

Future Activities
Final phase 6 is on its way for starting. Some activities already started and even are completed; we all used time during interruptions of the previous phase.
In particular was completed the production and validation of training material, now can be downloaded from the official web site sis-ma.in

Time was also used for studying and defining adjustments to the implementation and installation activities taking in consideration all lessons learned during the previous phases.

Attached: