



# **M&E SYSTEM USER MANUAL**

**(Version No. 2018.01)**

**For the Users of the BSHDC Monitoring & Evaluation (M&E)  
System**

**January 2018**

## ACKNOWLEDGEMENTS

Counterpart/ Arthur should guide or finalize this section

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# **CHAPTER 1: INTRODUCTION**

## **1.1 Introduction**

The purpose of this document is to describe the process the consultant will take in developing a system capable of tracking layering across a complex program implemented by Blantyre synod health development commission. The document lays out the development steps, how the system functions, and challenges and lessons learned in operationalizing the system. The BSHDC M&E system represents a significant step forward in tracking the layering of services provided to individual by different project thematic areas, while using aggregated-level records to facilitate better informed decision making. When enabled through an environment of strong coordination among thematic areas to facilitate shared ownership of data collection and reporting, local system administration support to build and maintain a single reporting system, and inputs from M&E and program staff to build analytical views to answer key performance questions, a single DHIS2-based BSHDC M&E reporting and monitoring system can provide a powerful platform to obtain aggregated-level insights to improve service delivery for Blantyre synod health development commission target groups.

## **1.2 Background**

A key hypothesis of BSHDC is to satisfy the different programmatic and reporting requirements of each partner/donor it is working with. To test this hypothesis, it is critical to understand the numbers of services BSHDC is implementing across thematic areas. This, therefore, calls for the need to put in place a robust and reliable Monitoring and Evaluation System to support BSHDC in realizing its development initiatives. Realizing the challenges, as well as the opportunities for synergies and enhanced impact at the project level, the Blantyre synod health

development commission through the consultants want to develop a single comprehensive M&E system to track and analyze data across program areas, to facilitate effective program performance monitoring and more informed.

### **1.3 Why DHIS2?**

DHIS2 is selected as the software platform for the BHSDC M&E system because of its scalable, extensible, and open source architecture. By leveraging the flexibility and adaptability of DHIS2, the BHSDC could tailor the system to the unique data collection and reporting requirements of each thematic area within a single reporting system without the need to pursue expensive, one-off customizations for each thematic area as typically would have been required to implement a commercial solution. Furthermore, DHIS2's suite of out-of-the-box tools including data entry, analytics, and mobile data collection gives it an important advantage over other MIS solutions that often contain components of these tools but not all, which necessitates linking and maintaining multiple software packages to implement a comprehensive solution. DHIS2 is the open sourced software used by many organization and Ministries of Health around the world for performance management. This makes a DHIS2-based system theoretically easier to "plug in". DHIS2 can also be used on a variety of technologies including phones, tablets, computers, and allows data entry while you are offline – which is essential in parts of BSHDC where there is limited or no internet connection.

### **1.4 Organization of the Manual**

This M&E System user manual is divided into 6 chapters. The first one gives a brief introduction and background to the development of this M&E system for Blantyre Synod Health Development Commission (BSHDC). It then describes how the M&E system was developed. This is followed by an overview of the developed and

configured M&E system. Thereafter, data entry procedures are explained, including pictures of key forms in the system. This is followed by an overview of reports that will be generated periodically and at the end of the year. In the end, concluding remarks are presented.

## **CHAPTER 2: M&E SYSTEM DEVELOPMENT**

### **2.1 How was the M&E System Developed?**

Development was led by the consultants and the overall Project Team included: MEAL Manager, Director, Head of program, Health Manager, and other relevant program team members. The Project Team led the process for clearly outlining data use needs and data capture systems for each program areas, harmonization requirements for thematic areas which similar activities, and associated DHIS2 system requirements to enable the kinds of layered reporting required by the program.

The phases of the M&E System development progressed as outlined below:

1. **Discovery**: One on one meetings with departmental heads to understand their reporting needs, reportable indicators, and systems for data capture and flow.
2. **Configuration**: Working backwards from outputs to define which inputs the system configuration required; adapting BSHDC data collection tools; user acceptance testing (UAT); multiple rounds of reconfiguration and UAT to incorporation improvements based on user feedback.
3. **Frequent learning, dialogue and feedback** shared between - parties via email and during planned regular meetings with the Project Team and the consultants.

### **2.2 Discovery: Understanding Partners' Data Collection Needs, Forms, Processes and Systems**

The consultants worked with each department/program areas to thoroughly assess and map the data to be captured into the system. This created efficiencies for thematic areas as they were moved away from paper-based systems to web-browser in DHIS2 based system.

To understand BSHDC data collection needs and processes, the consultant developed a template to collect the following information:

- ✓ Description of primary data collection tools for a specific indicator
- ✓ List of partner/donor paper-based forms used to collect data
- ✓ Level for data collection, whether at district-, facility-, or catchment area
- ✓ Frequency of data collection and entry into the available system
- ✓ The volume of data outputs collected monthly/quarterly/annually.

The consultants then used the data from this discovery phase to configure the BSHDC DHIS2 based monitoring system based on harmonized and aligned BSHDC data collection needs. BSHDC then provided feedback to improve the BSHDC DHIS2 based forms.

## **2.3 Configuration: Defining Inputs, Adapting Data Collection Tools, UAT and Reconfiguration**

The consultants led the design and implementation of this system in DHIS2, an open-source technology developed by the University of Oslo and now widely



adopted by other NGOs for performance monitoring. The system comprises of various aggregated modules, which allow for program services tracking.

## **2.4 Server Hosting**

BSHDC needs to procure a Microsoft based server in order to host the database. This will help as all the Program Teams will be able to access the system at any time. The consultants will configure the database on the server and will build the capacity of the M&E team and IT on the troubleshooting of the system.

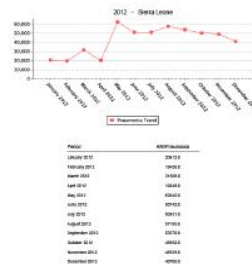
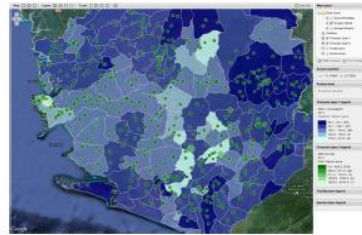
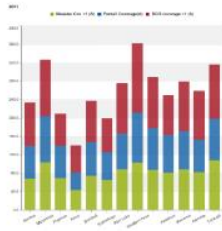
## **2.5 Privacy and Confidentiality**

All system users will be given Standard Operation Procedures (SOPs) and manuals concerning privacy and confidentiality within their organization including the appropriate use of data management. The System Administrator within BSHDC and senior management will meet to discuss this matter and thereafter come up with SOPs for users and privacy control. This will then be shared with all system users and will be included as part of the training or orientation on the system. This will include the provision of a “need to know” policy with only selected individuals within an organization with access to the system. The database entry screen will be password protected with only those approved by the MEAL Manager and Management for access to enter or analyse data. A list of all users will be kept on file by the MEAL Manager with an accompanying written confirmation of privacy and confidentiality understanding.

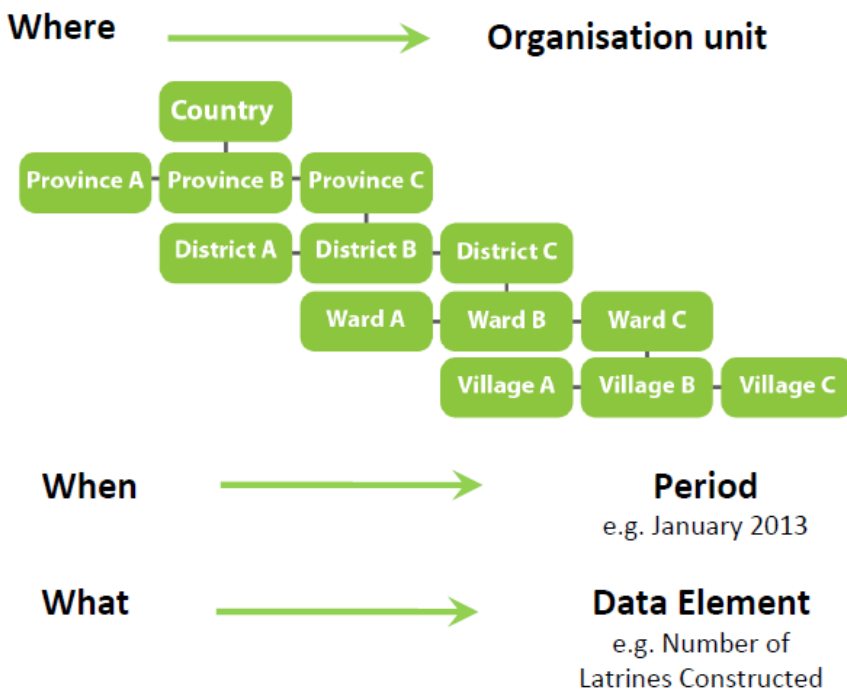
## 2.5 Pictorial Focus of What the M&E System Can Do

### 2.5.1 What will the system do?

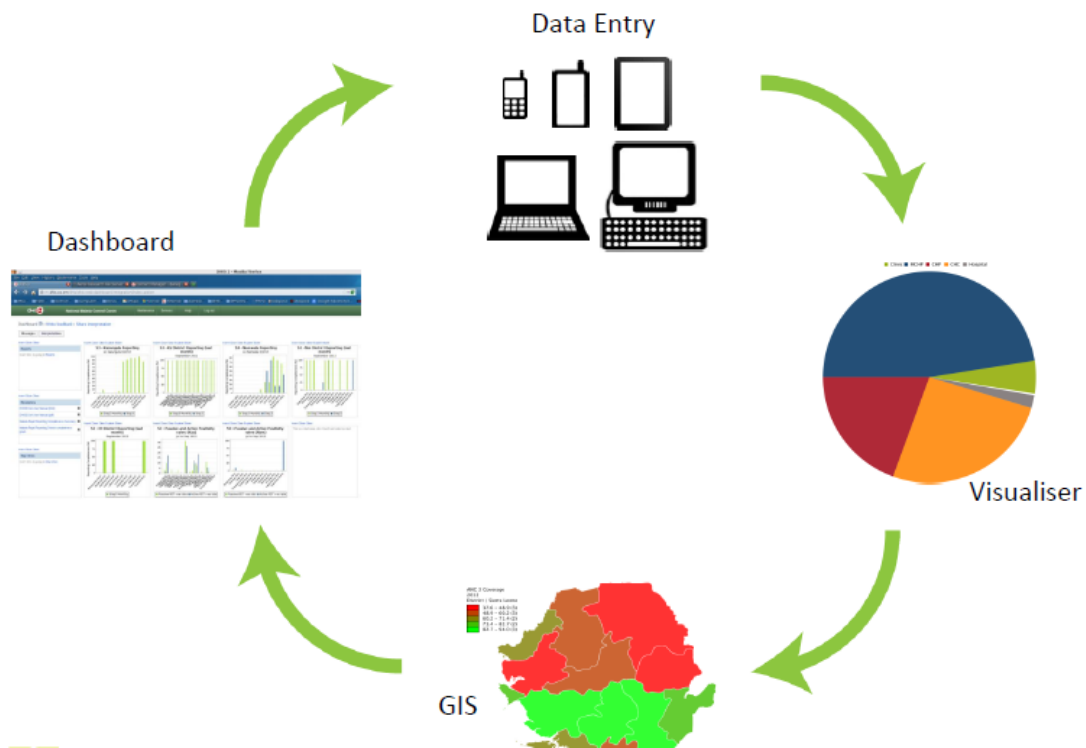
- Collects data
  - What
  - When
  - Where
- Displays data
  - Charts
  - Maps
  - Reports
- Outputs Data
  - Images
  - Documents
  - Reports



### 2.5.2 The system module/data flow



### 2.5.3 System Application



## **CHAPTER 3: OVERVIEW OF THE CONFIGURED M&E SYSTEM**

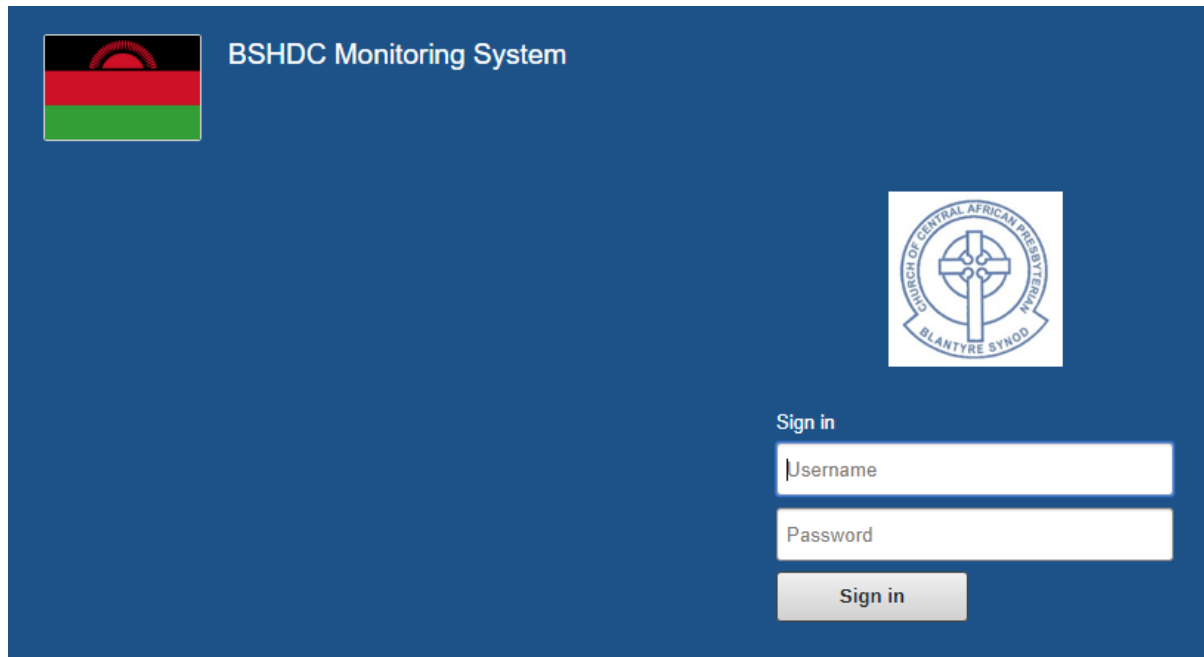
### **3.1 Getting Started with BSHDC**

#### **3.1.1 Opening BSHDC**

The BSHDC is a monitoring system based on DHIS2 open source platform. The system works both online and offline. Once the system is fully developed, it will be accessed through Internet browser either Mozilla Firefox or Google Chrome and through the office server. To open it, click the system link.

#### **3.1.2 Logging in and out**

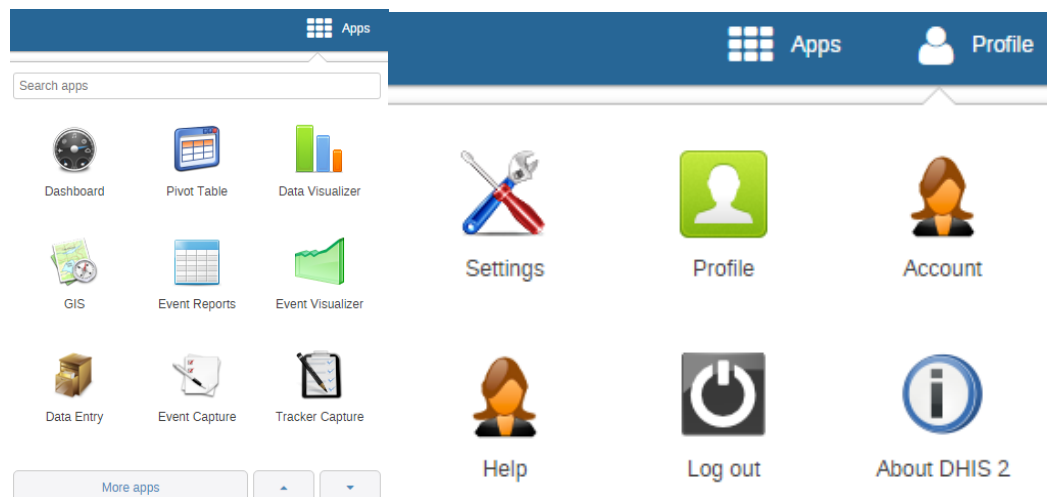
Once you see the blue login screen of BSHDC you must enter your user name and password to log in to the application. If the login is not successful you will be notified that the username or password is incorrect and asked to re-enter these credentials. Once you have successfully logged in you will see the BSHDC Dashboard where you can immediately monitor the latest data in your selected charts/tables/graphs and access your favorite BSHDC sites (reports, etc)



When you have finished your BSHDC session we recommend that you log out before closing the browser. Use the log out link in the upper right corner and you will be returned to the login screen.

## 3.2 Menus and Navigation

The BSHDC has two menu systems; the left menu which leads to the various dashboard features, and the right side menu "Apps and Profile" to navigate between features inside each module. The BSHDC symbol in the top left corner is a fast link to the user-defined start page, the home page. Often this is set to the dashboard module.



The BSHDC consists of various modules (major components) which each have specific features, such as **data entry, reporting, dashboard, GIS, Pivot table, Data Visualizer, etc.** You can access these modules from the top menu either under **Apps**.

Profile, on the other hand, is where you will find the more operational features like **settings, profile, Account, Log out etc.** Under the top menu item **Help** you can access the built-in user manual, update your user details, or view information about the running DHIS2 application.

To move to a new module you need to move the mouse pointer to one of the top menu items; Apps, or Profile. Then a submenu with modules will appear. Click on the module you want to open.

### 3.3 Navigation inside Modules

When you open most of the modules you will see the module main page which lists the major sub-modules or features in the middle of the screen with a short description. Simply click on the feature you would like to open.

When inside a module you will always see the left side menu with links to its features. Use this menu to jump between features.

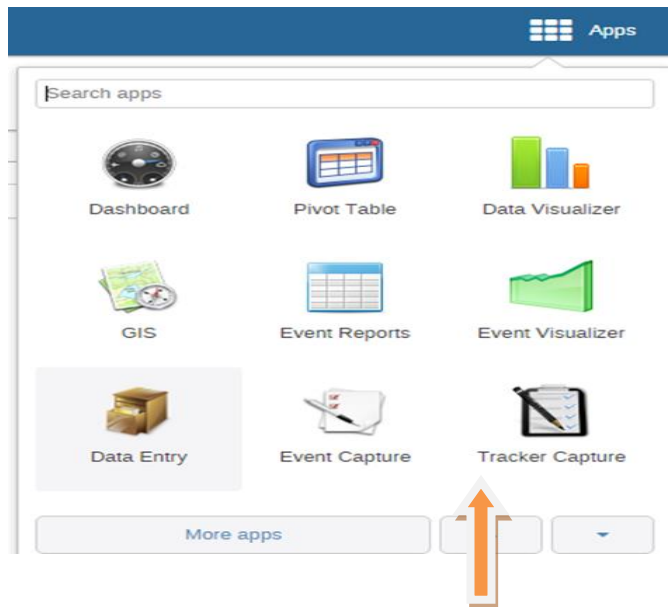


The data entry and dashboard modules do not have a menu system as they only contain one feature; everything is in one page, so no need for a menu there.

## CHAPTER 4: DATA ENTRY

### 4.1 Data entry with BSHDC


To open the data entry window click on the Apps tab displayed in the main menu. A drop down menu will appear listing the services provided by BSHDC. Click on the Data Entry option.



Accessing the Data Entry Module in the BSHDC

For each data to be valid in the BSHDC, three (3) parameters (where, what and when) are required. Where is for the health facility/project name/ school etc (**organization Unit**), what dataset/form/element (**dataset**) and when the data is for (**period**). All these three parameters are predefined by the administrators of the DHIS2; the job in the data entry is just to select which one. The following screen, shows how to select the above three parameters.



**BSHDC Monitoring System**

Malawi

Biantrye District

Data Entry

Organisation Unit

Biantrye District

Data Set

[ Select data set ]

Period

[ Select period ]

Prev year

Next year

## 4.2 Entering data

To start entering data the first step is to open the correct form. Follow these steps:

1. Locate the orgunit you want to register data for in the tree menu to the left. Expand and close branches by clicking on the +/- symbols.
2. Select a data set from the dropdown list of data sets available to your selected orgunit.

The datasets, in its simplest, is a form in which data are entered. The number of datasets is therefore equivalent to the number of forms available.

3. Select a period to register data for. The available periods are controlled by the dataset's period type (reporting frequency). You can jump a year back or forward by using the prev year and Next year buttons.

Simply start entering data by clicking inside the first field and type in the value. Move to the next field using the Tab button. Shift+Tab will take you back one step. The values are saved immediately and do not require any save/finished button click. A green field indicates that the value has been saved in the system (on the server). On a slow connection it might take some time before the values are saved.

BSHDC Monitoring System

Malawi  
Blantyre District

Data Entry

Organisation Unit: Blantyre District  
Data Set: BSHDC HN Reporting Form  
Period: July 2017  
Prev year Next year

BSHDC HN MONTHLY REPORTING FORM

Indicator Name	Value
Number of Partners Mapped	<input type="text"/>
Number of MoU Signed	<input type="text"/>
Number of Garden Established	<input type="text"/>
Number of Groups Established	<input type="text"/>
Number of Groups Monitored	<input type="text"/>
Number of Mothers Reached	<input type="text"/>
Number of Males Trained	<input type="text"/>

## CHAPTER 5: GENERATION OF REPORTS

### 5.1 Introduction

This function, it must be noted, allows eligible system users to access detailed and aggregated information collected from the field and projects, which were entered into the M&E system. With available reporting functions under this menu, the user is able to generate a number of reports, such as monthly, quarterly, semi-annual or annual reports. Below are descriptions of these reports.

### 5.2 Progress Reporting

It is important to note that this M&E system will be used alongside other essential instruments that were developed prior to the system development. Such instruments are the M&E Framework, data collection tools and Progress Report template. The MEAL Manager, as a champion of the M&E system will have to ensure consistent and standard use of the forms and templates. However, adjustments can be made based on project or donor specific reporting requirements. But with how the system is *monthly, quarterly or semi-annual progress reports* can be generated. It is anticipated that as part of progress tracking, the reports will be including a summary as per these two tables:

**Table 1: Summary of Quarterly and Annual Targets**

#	Activity	Annual Targets	Targets for this Quarter

**Table 2: Summary of Progress made under each Goal and Objective**

#	Goal & Objectives	Activity	Annual Targets	Targets for the	Achievements in the Quarter	Cumulative Achievements	Variance
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				Quarter		this Year	

Once the above tables are filled out and information shared during review meetings, participants need to interrogate progress against targets and then make necessary decisions going forward. MEAL Manager and his team will have to ensure that appropriate narrative is given in the report to give meaning to the data presented.

## 5.2 Annual Report

On an annual basis, BSHDC is expected to hold its annual review meeting at which the M&E team will be expected to present an annual report. Data from the M&E system will enable the team to generate essential tables, figures and graphs explaining progress made during the year against annual targets as shown in the M&E Framework, which is required to also be reviewed and updated during this same period. There is need for consistency in the use of the Annual Report template as this will ensure easy tracking of performance over the years. After the Annual Review meeting, the M&E team will have to incorporate comments and feedback from the meeting to produce a final Annual Report.

## 5.3 Other Reports

This M&E system has the capability to allow the System Administrator or MEAL Manager to define and make adjustments to suit new reporting requirements. They will be able to create a new template for data entry, and/ or generate reports that are required for specific new activities, projects, proposal for prospective assignments and so on. Since data from this can be exported to other platforms such as Microsoft, some data can be used in MS Excel or

Word for generating tables, graphs or figures as one is preparing and writing the reports.

## **CHAPTER 6: CONCLUSION**

The M&E System for BSHDC has been developed to act as a central system for managing data and generating reports essential for the operations of the organization and its programmatic work. This system will enhance evidence based decision making if users are going to follow SOPs in the use of the system. Each level of users, including field teams and data entry clerks, up to managers, have a critical role to play in ensuring the validity and reliability of data that goes into the system. As a matter of fact, it will be the same which will be used for generating reports for decision making on various fronts such as future programmatic expansion, budgets and proposals, as well as reporting internally and externally on current programmes. Thus, the MEAL Manager and Management will have to ensure that standards are being followed and periodic reviews of performance against targets are held. This will also provide an opportunity for continuous checking of consistent use of the M&E system, as well as the continuous system development or perfection.