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Mid Term Review of the Health Sector Strategic Plan III 2009-2015

Monitoring and Evaluation

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Mid Term Review of the Health Sector Strategic Plan III 2009- 2015

Monitoring and Evaluation

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Acronyms

CCHP	Comprehensive Council Health Plans
CDC	US Government Centers for Disease Control and Prevention
CHAI	Clinton Health Access Initiative
DD&U	Data Dissemination and Use
DHIS2	District Health Information System 2 (web based open source health management information system developed by HISP)
Epicor	Accounting system (IFMS) used by LGAs
FRS	Facility Register System
HDSS	Health and Demographic Surveillance System
HISP	Health Information Systems Programme (global network for development of health information systems)
HIV/AIDS	Human immunodeficiency virus/Acquired Immunodeficiency Syndrome
HMIS	Health Management Information Systems (in Kiswahili: MTUHA)
HSSP III	Health Sector Strategic Plan III (2009 – 2015)
ICT	Information and Communications Technology (or Information, Communication and Technology)
IEK	Information, Evidence and Knowledge
IFMS	Integrated Financial Management System
IHI	Ifakara Health Institute
ISP	Internet Service Provider
IT	Information Technology
LGA	Local Government Authority
M&E	Monitoring and Evaluation
MCST	Ministry of Communication Science and Technology
MDA	Ministries, Departments, Agencies
MDG	Millennium Development Goals
MESI	M&E Strengthening Initiative – as in “Combined Plan” – October 26, 2010
MKUKUTA	Mkakati wa Kukuza Uchumi na Kupunguza Umaskini Tanzania (in English: NSGRP)
MOHSW	Ministry of Health and Social Welfare
MRCC	Medical Research Coordinating Committee

MTR	Mid Term Review (for HSSP III)
MTUHA	Mfumo wa Utoaji Taarifa za Afya (in English: HMIS)
NBS	National Bureau of Statistics
NICTBB	National ICT Broadband Backbone
NIDS	National Indicator Data Set
NIMR	National Institute for Medical Research
NSGRP	National Programme for Economic Growth and Poverty Reduction (in Kiswahili: MKUKUTA)
NSS	National Statistical System
P4P	Payment for Performance
PlanRep	Planning and reporting database used by LGAs
PMO-RALG	Prime Minister's Office, Regional Administration and Local Government
PO-PSM	President's Office, Public Service Management
RTI	Research Triangle Institute
SAVVY	Sample Vital Registration with Verbal Autopsy
SPD	Sentinel Panel of Districts
SWOC	Strengths, Weaknesses, Opportunities and Challenges
TANHER	Tanzania National Health Research Forum
TIIS	Training Institutions Information System
TTCL	Tanzania Telecommunications Company Ltd
TWG	Technical Working Group
UDSM	University of Dar es Salaam
UiO	University of Oslo
USAID	United States Agency for International Development
VRS	Vital Registration System
WHO	World Health Organisation

I. Introduction

The main purposes of Monitoring and Evaluation in the health sector, as stated in HSSPIII (Ministry of Health and Social Welfare Tanzania, 2009) are to improve evidence-based decision-making and to enhance public accountability. The ultimate measure of the success of any M&E initiatives should therefore be whether there have been any improvements in the use of information to support decision making, as well as whether the public is better informed, and able to comment on, health sector plans and activities.

However, use of information, whether for decision making or accountability, depends on systems being in place to produce good quality and appropriate information, and this was not the case at the start of the strategic period, as was clearly stated in HSSPIII. The first phase of the activities and objectives for M&E within HSSPIII was therefore to take steps to address the known deficiencies in the existing information systems, and progress in these areas is the main focus of the review at this mid term stage. Nevertheless, it is also important that activities are planned for the remainder of the strategic period that will ensure that the improvements in the information systems that are underway do, in practice, lead to improved decision making and enhanced accountability.

In HSSPIII the approach that it was proposed should be taken to improving the information systems was to develop a comprehensive M&E and Research policy and strategy, which would ensure that more integration and harmonisation would be achieved. In particular, it was noted that integration of the MOHSW monitoring systems with the PMO-RALG and MKUKUTA systems needed to be achieved, and the Health Management Information System needed to be revisited. At national level it was proposed that there would be data warehouses, where information from several sources would be merged, and used for further analysis, and also health systems research and other research would be stimulated

This review does not provide a comprehensive overview of all elements of the health information systems, since these have been well described in other reports, in particular the M&E Strengthening Initiative “Combined Plan” published in October 2010 (Ministry of Health and Social Welfare Tanzania, 2010) and the annual updates on progress with this Strengthening Initiative. Also, a detailed review of the current situation with regard to Health Information Evidence and Knowledge (IEK) in Tanzania has been carried out as part of the development of the Country Profile for Tanzania being prepared for the WHO Africa Health Observatory, which it is expected will be published in late 2013 (Rumisha, 2013).

Overall, the situation with regard to health information in Tanzania, as described in these and other reports, is of a considerable amount of data potentially available from routine data collection, from population surveys and research, but access to reliable, up to date, complete and useful information has continued to be poor. As a result, use of information for decision making has been limited, and parallel and uncoordinated systems of data collection have been set up to meet specific needs.

Since the start of the strategic period, there has been considerable investment in information systems or surveys, but potential users are still having difficulty in obtaining access to the information they need. What needs to be considered at this mid term stage is whether this is because the right steps are being taken to address the deficiencies, but it is still too early for these to start delivering improvements for the information users, or whether amendments are needed to the focus or pace of the work planned in order for the strategic objectives for M&E to be met.

Information and communication technologies (ICT), are an increasingly important tool for delivering the information that is needed, and so ICT plans and developments are considered within this report. The

sources of information for monitoring and evaluation include not only routine data collection but also population surveys and research, and so these are also considered.

2. HSSP III Health Strategic Objectives and Expected Results

The objectives and expected results for M&E and for ICT, within HSSP III can be summarised as follows:

Monitoring and Evaluation Strategies

1. To develop a comprehensive M&E and Research Strategy for the health and social welfare sector
 - Comprehensive plan for integrated M&E and research that:
 - takes account of information needs in the whole sector, and of all programmes,
 - includes formulation of a Health Sector Monitoring Framework, that clarifies roles and responsibilities for monitoring at all levels
 - includes development of a harmonised set of indicators, data elements and data sources (routine and non-routine)
2. Strengthen integrated systems for disease surveillance
 - Disease surveillance systems to be re-aligned and integrated, to facilitate improved disease surveillance of communicable and non-communicable diseases
3. Strengthen integrated routine HMIS, including
 - Information systems to be integrated into one HMIS, covering sector-wide information needs, include integrating related systems, such as performance appraisal and programme monitoring
 - MKUKUTA, PMO-RALG and MOHSW reporting requirements to be harmonised, sharing information at all levels – to facilitate the availability of integrated technical and financial progress reports from LGAs
 - Capacity for data collection, analysis and use across the sector to be strengthened.
 - Participation in HMIS to become part of accreditation of health facilities
4. Introduce data aggregation and sharing systems based on ICT
 - Data warehouses to be established at district, regional and national level, sharing information from LGA (PlanRep), HMIS, disease programmes and other sources

5. Enhance surveys and operational research

- Annual research implementation plan
- More collaboration between programmes leading to one joint research programme
- Research data availability in data warehouse
- Relevant community based information available (from Demographic and Health Surveys) for monitoring

ICT Objectives

1. Produce ICT strategy to make use of technology, including automation of data aggregation and analysis
2. Expand country wide information network at national, regional and district level

3. Findings and Issues by Strategic Objective and Crosscutting Issues

3.1 Issues by Strategic Objectives

Progress against the HSSPIII strategic objectives is summarised below, with further discussions on findings and issues later in this section.

3.1.1 Comprehensive plan for integrated M&E and research

The MESI work programme is, in effect, an M&E Strategy. It includes considering information needs in the whole sector, and of all programmes, although further work is required to ensure those needs are met in practice. Work has also started within MESI to clarify roles and responsibilities for Health Sector Monitoring, and on developing a harmonised set of indicators, data elements and data sources, but further work is still needed

A Data Dissemination and Use Strategy is currently in development.

There is a work package within MESI looking at surveillance, surveys and research, which aims to improve some areas of health research, but it does not appear that a comprehensive plan for research has yet been produced. National Health Research Priorities for 2013 - 2018 have been produced (NIMR, 2013), but work is still to be carried out to take this forward to facilitate improved surveys, linkages to other data sources and use of results in practice.

3.1.2 Strengthen integrated systems for disease surveillance

There has been some progress on improving disease surveillance through the MESI work package on surveillance, surveys and research, but little progress so far on integrating systems for disease surveillance.

3.1.3 Strengthen integrated routine HMIS

Implementation of the revised HMIS is almost complete, and reporting requirements for MKUKUTA, PMO-RALG and MOHSW have been considered as part of this revision. However, the revised HMIS is not yet delivering on the expected results stated in HSSPIII, in particular facilitating the integration of related systems, and facilitating the availability of integrated technical and financial progress reports from LGAs, and it is not yet providing timely and complete data for inclusion in key planning and management tools such as CCHPs and Performance Profiles.

Some work has started on improving capacity for data collection, analysis and use across the sector, as part of the MESI work package on in service and pre service training.

There is no progress so far on ensuring that participation in HMIS becomes part of accreditation of health facilities.

3.1.4 Introduce data aggregation and sharing systems based on ICT

A data warehouse has been set up at MoHSW that holds the information that is being submitted from the revised HMIS. However this is only a first step towards the expected results for this objective which

refer to data warehouses being established at district, regional and national level, sharing information from LGA (PlanRep), HMIS, disease programmes and other sources.

It should also be noted that the work on the development of data warehouses has not yet been linked to capacity development on data dissemination and use. One of the main aims for a data warehouse is to be a resource that will facilitate data analysis and provision of appropriate information to all users.

3.1.5 Enhance surveys and operational research

Some work has been carried out on enhancing surveys within the MESI work package on surveys, surveillance and research – in particular via the Sentinel Surveillance System., which is discussed later in this section. However there has only been a little progress so far with the other expected results for this objective, as there is no annual research implementation plan, or collaboration between programmes leading to one joint research programme. There is also no research data availability within a data warehouse, although it is understood that the two of the main health research institutions in Tanzania, NIMR and IHI, have current initiatives to make research results more available.

3.1.6 Produce ICT strategy

At the time of the Mid Term Review, there was no ICT Strategy for the health sector. However, the development of an e-Health strategy was in progress at the time of the Review, and this was formally launched on 30th September. This is a discussed later in this section.

3.1.7 Expand country wide information network at national, regional and district level

There have been recent improvements in the national IT network, and an important part of the e-Health Strategy will be to ensure that this is built on to expand the country wide information network for the health sector. This is discussed in more detail later in this section.

3.2 M&E Strengthening Initiative

3.2.1 Introduction

The main approach for meeting the M&E objectives is the M&E Strengthening Initiative (MESI), and this is divided into work packages that cover most of the key areas for M&E and ICT. For ease of reference, this structure has therefore been used for discussion of progress in key M&E areas. This allows comments within this report to be easily linked to the MESI Reports where more detailed information and discussion can be found.

MESI is a five-year strengthening program being implemented by a consortium of funding and implementing partners to enhance evidence based decision-making in the Tanzanian Health Sector. This was previously called the M&E Strengthening Project but has recently been renamed the M&E Strengthening Initiative to represent the ownership and integration of activities within existing M&E structures and personnel assignments.

The M&E Consortium is made up of Government of Tanzania (MOHSW and PMO-RALG), Funding Partners, and Implementing and Technical Support Partners, including Ifakara Health Institute (IHI), University of Dar es Salaam (UDSM) and University of Oslo (UiO), Research Triangle Institute (RTI), CDC Foundation (m-health project) and Clinton Health Access Initiative Tanzania (CHAI).

Operationally, a small team monitors activities on a regular basis, and meets weekly, with a larger team meeting on a monthly basis to discuss in depth progress of each work package. The work is overseen by

a Steering Committee, and semi-annual and annual reports are produced each year summarising progress and plans.

The work of MESI is organised in Work Packages, each covering a key area of information systems development. The work packages, and a brief summary of the current situation for each area is given below. More information can be found in the MESI Annual Reports (M&E Strengthening Initiative Consortium, 2011, M&E Strengthening Initiative Consortium, 2012, M&E Strengthening Initiative Consortium, 2013) .

3.2.2 Management and Revision of Indicators and M&E Tools

The aim of this work package is to update the HMIS (MTUHA) tools, including registers, tally sheets and summary forms, to meet the needs of all stakeholders, and to manage a harmonized set of indicators that monitor key health programs, systems and policies at all levels.

In addition to making changes to the HMIS, the Indicator Management team have also worked on defining a standardized template for all indicators used within the MOHSW. However, it was noted in the most recent annual report for MESI that there is still a need to go through the issues identified at the start of this initiative in relation to the ability to use the tools to report on core indicators including MDG, HSSP III, and CCHP.

The Mid Term Analytical Review of Performance of HSSP III, published in September 2013 (Ministry of Health and Social Welfare Tanzania, 2013) , considered not only the HSSP III indicators but also took into account other core indicators, together with commenting on data sources. Discussions that have been held on the indicators in the Analytical Review, and their relevance and reliability, provide a useful input to the further work that is needed on developing a harmonised set of indicators.

The user requirements were taken into account in the revisions that have been made to the HMIS. However, the MESI report notes that consensus and clarification will be needed, and this will need to involve all users of these indicators. This is an important next step in the process of improving the information systems.

It transpired during the MTR that users of the parallel systems are reluctant to consider any changes to their working practices until they see that the new systems are actually delivering useful information. Their experience to date has been that information is unavailable, inaccessible or unreliable. Stakeholders want to see how the revised HMIS will meet their specific information needs before they are willing to consider amendments to their current data collection arrangements. Until systems have been integrated or harmonised, data in some areas, such as for finance or HR, are potentially available from both HMIS and other data sources, which causes confusion for information users regarding what should be considered as the primary data source.

Other activities within this work package include the development of a minimum data set and data elements required from hospitals by the MOHSW but, at the time of writing, it is understood that this still needs to be finalised, and presented to stakeholders for review and agreement.

There are plans to work on a National Indicator Data Set (NIDS) and national data dictionary (in Swahili, with English translation) to include the work that has been completed on all the revised HMIS tools. The MESI partners agree that the development of clear definitions for data items within agreed minimum data sets is an important stage in improving information systems. This is part of the work to harmonise different information systems that cover similar areas of the health sector, and also to harmonise key data items in surveys and other research with routine data collection systems, so that information can be brought together from these different sources.

MESI activities will involve the National Bureau of Statistics (NBS), since they have responsibility for holding data standards. It is understood that a review of the Statistical Act is underway and that the revised Act will include a stronger emphasis on the importance of data standards, and the role of NBS in maintaining these. Also, following concerns expressed by users of NBS statistics about the accuracy of certain statistical products, especially those originating outside of NBS, a project is underway within NBS to establish a system of quality assurance that will guide various producers of data.

3.2.3 HMIS Test Region

The aim of this work package has been to test HMIS tools, practices and procedures before national roll out, including making amendments where necessary, and also sharing best practice to assist with national rollout.

The DHIS2 software has been in use in the Test Region since the start of the M&E Strengthening Initiative. HMIS officers in the councils and the Regional offices are able to work with DHIS2. Many users in the councils can use the pre-defined reports and some can create custom reports.

Historically, data have flowed vertically from health facilities, districts, and regions up to the central level. However, in the test region, the DHIS2 software operates online in all districts. This means that the responsible person at the level of district, region and central can access these data through the MOHSW online connection in real time. So although the data collection at facility level is still paper based, and the data still flows vertically from the facilities to the districts, there is now the opportunity for districts to create reports that can be shared with the facilities.

Some continuing challenges were noted in the MESI reports, in particular the time it takes to fill out the forms, and the lack of Human Resources to do this when there is a heavy patient workload, and also the fact that there are other forms to be filled in, to meet the requirements of other stakeholders. Harmonisation of the data collection requirements is a priority in MESI, in order to reduce the data collection burden on the staff in the facilities.

3.2.4 HMIS National Roll Out and Consolidation of Data

HMIS tools have been revised and tested and the plan is to use the new revised tools nationally by midyear 2013, and have all regions using the new tools and DHIS-2 by end of year 2013. Training in the new tools was underway while the Mid Term Review was being carried out, and it was reported that it was going well. A data warehouse has been developed to hold the data from the revised HMIS.

Experience so far has shown that there is improvement in completeness of data collection after DHIS2 has been implemented, but some challenges still remain.

3.2.5 Data use & Systems Strengthening

A Data Dissemination and Use (DD&U) Strategy for the Ministry of Health and Social Welfare (MOHSW) is currently being developed, and consultation with users is underway.

The importance of this part of the MESI work programme is emphasised in the recommendations for priority actions within the MidTerm Analytical Review, where it is noted that there needs to be effective communication of the data available from the new HMIS. In terms of facilitating wider use, the Analytical Review also notes the importance of having analytical capacity at district and regional level.

The importance of data dissemination and use is also recognised by NBS. One of five main components within the Tanzania Statistical Master Plan 2009/10 to 2013/14 relates to Data Development and Dissemination (National Bureau of Statistics, 2010). This refers to the importance of population census, but also the importance of the production of routine and administrative data within the National

Statistical System (NSS) which provides social economic data for continuous monitoring of results and an early warning for decision makers at all levels. Within this plan, a broad definition is used for the NSS, since it is seen as being made up of “data collectors and users comprising Ministries, Departments and Agencies, Research and Training Institutions as well as General Public in general.” This definition means that the NSS refers not only to information produced through censuses and surveys but also to “routine data collection systems from households, establishments and institutions.”

As well as the information that is available from the revised HMIS and other routine data collection systems, Health Research Institutions in Tanzania are also starting to provide ICT-based sources of health information. These include the National Institute for Medical Research’s National Health Research Database; NIMR Highlights; and Ifakara Health Institute (IHI) e-bulletins and policy briefs (Spotlights). IHI is also currently developing an electronic library for its research data with the aim of making it publicly accessible in the near future (Data Portal), and an electronic library where research publications and other reports can be lodged (Digital Library). However, it is not clear whether the potentially useful material being made available, is yet being used to assist in monitoring or developing policy.

Both NIMR and IHI are working on capacity development to be able to understand and interpret the information. The institutes are building up data specialist knowledge, to tackle problems with the data, such as incompleteness, or lack of up to date figures, or data brought together from different sources, which are not yet harmonised. In the health sector in Tanzania data quality, different methods and various times of data collection, make analysis at national level challenging, as discussed with the analytical report team in the MTR.

3.2.6 Surveillance, Surveys and Research

This work package within MESI is working towards an institutionalised and well coordinated community based information system that provides in-depth, standardised and regular community level information from surveillance, surveys, vital registration and research to complement the routine facility-based information systems for decision making and health planning purposes. This includes ensuring the availability of data on births and causes of death for use in planning and policymaking until a fully functioning national vital events registration system is in place

A community based data collection and reporting system, the Sentinel Panel of Districts, has been set up, coordinated by IHI (see <http://ihidata.org/datasets.php>). This generates health facility and population based information from 27 nationally representative districts. This includes 4 HDSS sites and 23 districts where coordinators verify reported vital events and conduct verbal autopsy interviews, which are then used by trained physicians to code causes of death. The districts have been selected on advice from NBS to ensure that they are representative, and an important task within this work package is to keep the selection under review to ensure that a nationally representative sample of community-based information is maintained.

The information available from this initiative can provide mortality trends at area specific level and national level projections, as well as providing understanding of drivers of mortality causes. This work package within MESI also includes assessments of the link between the information made available through this, and other MESI work programmes, and improvements in quality of care and health outcomes in the community.

The most recent MESI annual report notes that one of the challenges for the surveillance system will be to find further funding sources when the current project funding comes to an end. Ensuring that the surveillance system demonstrates its value through providing information that has an impact on health care will be important in ensuring continued support for this important source of information, and in any discussions regarding future funding.

It is assumed that the coordination and harmonisation of research also comes under this MESI work package, although there appears to be have been limited progress so far in this area. Any work in this area would need to be done in liaison with the Medical Research Coordinating Committee (MRCC). MRCC is the national health research coordinating body that ensures all health research follows country's ethics requirements. It is understood that the functions of the Committee also include coordination of health research conducted in Tanzania.

A forum for discussing and agreeing coordination of research is also provided by the Tanzania National Health Research Forum (TANHER Forum), which is coordinated by NIMR, but involves representatives from all the main institutions involved in health research. (NIMR, 2011). In 2009 it published 2nd Edition of Guidelines of Ethics for Health Research in Tanzania (National Health Research Ethics Committee Tanzania, 2009). However the role of the Forum is wider than research ethics since it is intended to be “a consultative and advisory body to policy and decision makers as regards to health research coordination, undertaking collaboration, dissemination of health research and utilization of research results for policy and decision making”. Its vision is that “the TANHER Forum becomes an effective National Coordinating Body for promoting quality health research that informs policies and plans”.

3.2.7 HMIS Software Development, Systems Integration and ICT

This work package covers not only HMIS software development, but also wider ICT and systems issues as part of the broader e-Health Strategy, which was launched on 30 September, but which was not available at the time of the Mid Term Review. This Strategy is expected to include a move towards an integrated e-health infrastructure and enterprise architecture. As part of the work on developing this Strategy, a five-year indicative National Costed eHealth Action Plan, with a budget, has also been developed.

The objectives within this MESI work package include the HMIS data warehouse that has already been mentioned, and ensuring that this warehouse is integrated with other data sources and related systems.

This work also covers enhancing the reliability and reach of MOHSW ICT services including support to MOHSW HQ, Regions, Districts and Referral Hospitals, and the establishment of maintenance processes and structures for hardware and communication equipment and software at districts, regional, hospital, and national levels.

Another objective within this work package is to introduce use of mobile technologies and Internet-based information systems to contribute to remote data collection, and it is expected that m-Health initiatives will form part of the e-Health Strategy. There are already some m-Health initiatives in operation that appear to be working successfully. However these are mainly small scale pilot developments, funded by individual projects and the challenge will be to see if these pilots can be scaled up to operate on a national scale.

In relation to HMIS software developments, it has already been mentioned that the MOHSW has carried out a major review of its HMIS data collection tools. These tools were piloted in the Pwani Region, in line with the District Health Information System – Version 2 (DHIS2), under the HMIS Strengthening Project, which is part of MESI, and the Payment for Performance (P4P) Pilot in the Pwani Region.

Another development that is linked to this is the development of the web based Facility Registry System (FRS), which is now being implemented.

In relation to overall ICT for health, the Health Information, Evidence and Knowledge section of the WHO Africa Health Observatory Country Profile that has already been mentioned refers to a review by Foster of e-Health and health information systems in seven African countries, which was carried out in 2012 (Foster, 2012) . At that time, it was found that Tanzania had some plans and implementations on governance and national ownership for ICT, but no plans or implementations were found for an e-

Health infrastructure, i.e. no evidence that issues of standards, interoperability, national registries, health information exchanges and data warehouses were being addressed, and these are gaps that the e-Health Strategy will need to address.

There are many different stakeholders involved in the implementation of any plans within the e-Health Strategy, for example the Information and Communication Technology Unit within the new organisational structure of the Regional Office of PMO-RALG. The responsibilities of this Unit include preparing an ICT Strategy, and also, in collaboration with PMO-RALG, assisting the coordination and development of ICT Standards for software and hardware acquisition at RS and LGAs. The MTR team did not get information on whether the MOHSW and PMO-RALG ICT Strategies are compatible and complementary.

3.2.8 In-service and Pre-service training

It is recognised in MESI that improvement is needed in the understanding and use of information by health staff in Tanzania. This perception draws not only on comments by health professionals in Tanzania, but also on the reported situation. For example, a Health System Assessment report published in 2011 by USAID suggested that the use of the information to support decision-making processes is limited. It refers to data and information being passed through various levels of the administration, but that they are just passed on rather than actively being used for local planning. The USAID report therefore concludes that there is a need to strengthen the capacity of health workers to understand the value of health information and data, and to be able to use it at all levels of the health system. (USAID, 2011)

This gap has also been noted more generally. The African Statistical Newsletter of June 2012 included a report of the 1st Conference of African Ministers responsible for Civil Registration and Vital Statistics, which was held in Addis Ababa in 2010. A key paper presented at that conference discussed “statistical capacity building as a knowledge management enterprise” and stressed the importance of flows of knowledge rather than the accumulation of a stock of knowledge in one organization, and the importance of encouraging the development of “learning organizations” where people have a culture of producing, exchanging and applying knowledge (Sanda, 2012).

The aim of this work package within MESI, which is intended to address this capacity gap, is that Ministry of Health will have a pre-service and in-service training and support system in place that ensures all health workers have the skills and knowledge to collect and use health information to improve health services delivery. At the time of the Mid Term Review, limited progress had been made in this area, although the team had visited several universities in Tanzania to get a better understanding of the courses and training opportunities which are currently available for health care workers and public health professionals interested in specializing in Monitoring and Evaluation, and there are plans to establish a Masters course in M&E..

3.3 Performance assessment by cross cutting issues

The following highlights some M&E factors in relation to key cross cutting issues.

Access

Access to health information is currently limited at all levels – from the community up to decision makers. However it is expected to improve with the current developments that have been mentioned above.

Within the 2003 ICT Strategy for Tanzania, one of the issues noted in relation to access is: “To ensure that the national ICT policy does not exacerbate the digital divide among the people of Tanzania, it must

contain provision for bringing access to the more remote areas of the country and those under served in urban areas.” (Ministry of Communications and Transport Tanzania, 2003). Although there have been considerable advances in ICT infrastructure within Tanzania since this policy was written, this issue still remains a challenge.

Coverage

The information from HMIS has in the past been incomplete, but this is expected to improve with the revised HMIS.

The vital registration system is not currently functioning properly, and so complete national information on births and on mortality is not currently available. Attempts to initiate a system through the Child Health programme are being undertaken.

There is no centralised information for several important types of information such as about staff houses, rehabilitation, expansion health facilities, and transport.

Quality

No statements of requirements are yet available for information systems, against which quality can be assessed, although work is underway to develop standards in some areas.

Efficiency

Monitoring efficiency is adversely affected by parallel and uncoordinated systems. Stakeholders in parallel systems are not yet ready to buy into one national system.

Sustainability

There is high reliance on partners in terms of systems development and implementation. In-service capacity building in M&E is donor dependent.

There is weak institutionalisation of projects, and limited opportunities for scale up of some successful local initiatives

Summary

In general, the current situation can be summarised as follows:

- The deficiencies in the current information systems are well known, and have been clearly documented;
- There is a considerable amount of work ongoing, or being planned, to address these deficiencies, in particular through the Monitoring and Evaluation Strengthening Initiative, and it is expected that these will lead to improvements;
- There is however little evidence yet of any overall impact on health sector activities as result of the work aimed at improving M&E or ICT.

4. Governance

4.1 M&E Governance

The current M&E work programmes are managed within the M&E Strengthening Initiative, and MESI also provides support for the running of the M&E TWG. These management arrangements appear to be working effectively. However, these will only function until the end of the Strengthening Initiative, and so it is important that long-term arrangements are put in place for M&E Governance.

These arrangements do not yet include other relevant MDAs. Especially the parallel systems of MOHSW and PMO-RALG have been shown as problematic in this MTR. It is also expected that there may need to be different governance arrangements for different aspects of M&E because different stakeholders will be involved – for example for e-Health / ICT, for data and information standards, and for research and analysis. The eHealth Strategy, that has just been launched, includes the establishment of an eHealth Steering Committee whose mandate is to direct, monitor and evaluate the implementation of the Strategy, and also to influence the Ministry. It is not clear, at the time of writing this report, how it is intended that this Steering Committee will relate to other management and governance arrangements that are in place for M&E.

4.2 e-Government Strategy

The e-Government Strategy for Tanzania (President's Office - Public Service Management - Tanzania, 2012), states that the government is committed to implementing e-Government across the country, but notes that “more effort and more innovation” are needed to provide value-added e-Government services. This Strategy builds on a national ICT Policy which was produced in 2003 (Ministry of Communications and Transport Tanzania, 2003).

It was noted in the ICT Policy that, at that time, despite rapid improvements Tanzania's ICT environment was still “somewhat challenged”, with ICT being concentrated mainly in Dar es Salaam. The main focus of this policy was to take steps to develop an appropriate ICT framework and infrastructure, including the training of ICT professionals. It included an aim to “develop and deploy a nationwide e-Health system that supports medical facilities in the under-served areas” but also noted the following as policy challenges:

- Introducing ICT supported access to health and nutrition services.
- Taming the prevalence of HIV/AIDS and other infectious and communicable diseases.
- Managing proactive health care systems for preventive and curative services.

Although ICT in the health sector is not specifically mentioned in the e-Government Strategy, many of the challenges mentioned are pertinent to the development and use of ICT in the health sector, in particular:

- Inadequate policy, legal and institutional framework for e-Government
- Silo-based e-Government initiatives
- Sustainability of ICT adoption in the public service
- Attitude and cultural challenges in the use of ICT

- Low robustness and security of ICT infrastructure
- Lack of integrated information systems

Another important issue related to ICT development is setting up appropriate procedures for the management of data that are held electronically, including secure storage, facilities for access and retrieval and ensuring the availability of appropriate metadata. The International Records Management Trust carried out a review of the situation in Tanzania and presented recommendations on the way forward in 2011 (International Records Management Trust, 2011). This review noted that there is a strong regulatory framework for managing public sector records in Tanzania, which should provide the basis for developing electronic records management capacity, although, at the time of the review there was little capacity in this area.

The review noted that two significant circulars were issued in 2009, by the President's Office – Public Service Management, that recognise records management as a vital component of ICT and e-Government programmes.

Circular No 5 covers requirements for the protection of confidential information that are held on electronic storage media.

Circular No 6: addresses electronic information management issues. It provides instructions on retention and disposition of government information in electronic form to ICT personnel, public servants who use ICT for their work and other public servants who have access to ICT tools.

This report also refers to the importance of introducing standardised formats and metadata for electronic records, but notes that, at the time the report was prepared, there was limited expertise to do this, and no source of training in Tanzania that could build this capacity.

4.3 National ICT Backbone

An important step in achieving the government of Tanzania's ICT vision is the constructing of the National Fibre Optic Cable network called the National ICT Broadband Backbone (NICTBB) – see <http://www.nictbb.co.tz/>. The Backbone is managed and operated by the Tanzania Telecommunications Company Ltd (TTCL) on behalf of the government, through the Ministry of Communication Science and Technology (MCST).

A report on the NICTBB web site dated November 2012, notes that, “with 7400 kms of Optic Fibre Cable already constructed, the backbone had been extended to eight border points, with a view to fulfil the Government's commitment to connect the landlocked countries to the International submarine cables landing in Dar es Salaam, and thereby making Tanzania a hub of ICT infrastructure and ICT solutions within the region.” . The NICTBB is operated as a wholesale business that is engaged in lease of capacity to Tanzania's licensed operators, i.e. Mobile network operators, Internet Service Providers (ISPs), local television and radio stations, Fixed Network, Fixed Wireless Voice and Data Service Providers.

This means that the benefits at local level depend on the local arrangements that have been made for access to the backbone, and this “last mile connectivity” has not yet been addressed adequately. However, it is understood that the third phase of Tanzania's National ICT Broadband Backbone (NICTBB) construction will start soon and will connect all the districts in the country.

4.4 Harmonisation

There is not a specific work package dealing with harmonisation but this underpins much of the work planned within MESI. The need for harmonisation of systems, and the role of commonly agreed data standards and terms, has already been mentioned. For example, the term integration is commonly used when discussing information systems developments. It is widely used within HSSPIII and within MESI reports, but it may not have same meaning for all, and so can lead to confusion. It can be taken to mean fitting into a community (one overarching health information systems framework). However, it can sometimes be perceived as everything coming together within one single system, which is a very different technical approach.

Another example is the term ICT that is commonly used to mean Information and Communication Technologies i.e. the technologies that can be used to provide information and facilitate communication. An Information Strategy would therefore be expected to cover not only ICT but also all strategic issues relating to data collection, analysis, synthesis, interpretation, dissemination and use, and relating to communications. An ICT Strategy alone would not provide strategic direction for information, and further work would be needed to cover those areas if only an ICT Strategy were produced. However, in some of the documents relating to ICT development in Tanzania, the alternative definition “Information, Communication and Technology” is used.

5. Cross-cutting SWOC Analysis – M&E

Drawing on the comments in the earlier sections of this Annex, the main Strengths, Weaknesses, Opportunities and Challenges can be summarised as follows:

Strengths

- Multi-stakeholder TWG
- Also multi-stakeholder involvement in the M&E Strengthening Initiative
- Deficiencies in information systems already known and well documented, and there are plans, and ongoing work, to address these.
- Improved data collection and information systems are being implemented (HMIS / DHIS II / HRHIS / TIIS / PlanRep / EPICOR)
- Wide range of data collected and potentially available for analysis and use (mixture of sample surveys, sentinel surveillance and administrative data available)

Weaknesses

- Poor establishment of accreditation (institutions), so there is no option to include participation in HMIS as one of the criteria for accreditation
- Focus on data collection rather than use
- Timeliness in availability of information from HMIS is poor
- Inadequate capacity & systems to follow through the current initiatives
- No mechanism yet for coordination of systems development, no links between health systems and PMO-RALG / district systems e.g. PlanRep, Epicor and OPRAS, and no integration with programme monitoring or performance appraisal
- Harmonised set of indicators, to meet the information needs of the whole sector at all levels, is not yet available, and there is lack of clarity in relation to the responsibilities for producing these indicators
- Vital registration system only partially functioning
- Effective national coordinating body is not in place (although eHealth Steering Committee has just been established)

Opportunities

- E-Health Strategy has just been launched (on 30 September 2013)
- DHIS will feed in to data warehouse at MoHSW
- New Statistics Act soon, including emphasis on data standards
- National ICT backbone

- National Health Research Forum
- Data Dissemination and Use Strategy currently being developed

Challenges

- Budget constraints for ongoing institutionalization of some of the current initiatives
- Coordination of partners towards sustainable systems building
- Learning & scaling up
- Large number of initiatives being carried out – requiring expert support and management, and very little capacity to cope with this.
- New ways of working and new skills will be needed to make use of increased availability of information and of e-Health approaches.

6. Recommendations

- Appropriate phasing needs to be agreed for the planned M&E initiatives so that the MOHSW team has sufficient capacity to manage and support these initiatives effectively.
- Focused implementation plans are needed for each area of M&E development, included those planned within the e-Health Strategy, with clearly specified activities, responsibilities and realistic targets and sensitive indicators.
- Data quality and data harmonisation issues that were highlighted in the Mid Term Analytical Review as barriers to the production of key indicators should be reviewed, and plans should be agreed to address these
- Plans should be drawn up for realization of benefits for stakeholders for all the M&E and information systems development areas. This is part of creating ownership of changes among interested parties (e.g. DPs requiring reports).
- Involvement and engagement is needed at all levels, during implementation as well as during the design stage – both to obtain feedback and to ensure that the initiatives introduced are beneficial in practice, so that ownership and local support is maintained.
- Supervision and mentoring should be available to support the staff involved in implementing and running any new or revised information systems that are introduced, with a mechanism for feedback and sharing of any lessons learned.
- Coordination is needed between partners (between different MDAs and between MDAs, donors and other stakeholders), to agree and to implement common definitions and standards for data items, indicators and data exchange protocols.
- Effective communication and shared working between TWGs should be set up, so that the M&E TWG can share with other TWGs progress with improved information availability, and get feedback from other TWGs on use being made of the information that is now available, and any issues that have arisen regarding accessibility, timeliness, relevance and quality. The information presented in the MidTerm Analytical Review, and issues that have been raised in the discussions on these analyses, can provide a useful starting point for this shared working.
- Capacity development is needed for the staff involved in the development and support for the information systems, not just for the users of the systems.

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