Establishment of District HIV/AIDS Monitoring and Evaluation Centres of Excellence

A report submitted to Makerere University School of Public Health as part of partial requirement for the HIV/AIDS Fellowship programme

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DECLARATION PAGE

I, ___________________________________________ do hereby declare that this programmatic report entitled Establishment of District HIV/AIDS Monitoring and Evaluation Centres of Excellence has been prepared and submitted in fulfilment of the requirements of the MakSPH-CDC HIV/AIDS Fellowship Program and has not been submitted for any academic qualifications.

Signed ………………………………… Date……………………………………
Jotham Mubangizi, MakSPH/CDC HIV-AIDS Fellow

Signed ………………………………… Date……………………………………
Dr. James Guwani, UNAIDS M&E Adviser, Host Institution Mentor

Signed ………………………………… Date……………………………………
Dr. Achilles Katamba, Academic Mentor
Dedication

This piece of work is dedicated to my family.
Acknowledgements

I wish to extend my appreciation to my Mentors Dr. Guwani James and Dr. Achilles Katamba for their continued support and guidance. I am further indebted to Dr. Chitate David and Ms. Kalweo Jane my first mentors.

Special thanks to the SPH/CDC Fellowship program staff, for appropriate guidance, similarly UNAIDS has provided, what very few host institutions can offer to a Fellow, the key achievements outlined in this report is manifestation to this.

Overall, I wish to thank the UNAIDS Country Office, UN HIV Joint Team, the Kasese and Kiruhura district, the Uganda AIDS Commission, the Ministry of Local Government, the MSH/STAR-E LQAS for their unreserved support during my two years of fellowship.
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<th>Acronym</th>
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<td>ADPs</td>
<td>AIDS Development Partners</td>
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<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
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<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
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<td>Health Management Information System</td>
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<td>LQAS</td>
<td>Lot Quality Assurance Sampling</td>
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<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
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<td>Monitoring and Evaluation of Emergency Plan Progress</td>
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<td>OVC</td>
<td>Orphan and Vulnerable Children</td>
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<td>PMMP</td>
<td>Performance Measurement and Management Plan</td>
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<td>Results Based Management</td>
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<td>UA</td>
<td>Universal Access</td>
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<td>Uganda AIDS Commission</td>
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<td>United Nations General Assembly Special Session</td>
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<td>United States Agency for International Development</td>
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Executive Summary

HIV/AIDS epidemic in the country continues to pose serious public health challenges. However, the M&E systems that would help track the progress are not fully functional and coordinated. This, coupled with the demand for results, increased funding to HIV/AIDS and multiplicity of partners, calls for a robust M&E system especially at the district level where implementation of HIV/AIDS programs takes place.

In order to address the challenges, UNAIDS in a collaborative support arrangement with the Ministry of Local government, Uganda AIDS Commission and Management Sciences for Health/STAR-E LQAS, piloted the establishment of two district HIV/AIDS M&E centers of excellence in Kasese and Kiruhura to demonstrate a functional M&E system for learning and replication.

The implementation adopted the ten-step World Bank Model of designing, building and sustaining a result based M&E system. This model provides extensive details on how to build, maintain and sustain a result based system. Overall the model highlights the political, participatory and partnership processes involved in building and sustaining M&E systems, that is to say, the need for consultation and engagement of all stakeholders in the entire process.

Using the model, a readiness assessment was conducted to identify district M&E priorities and outcome indicators. Capacity building was done for district staff to collect baseline values through Lot Quality Assurance and Sampling (LQAS). This included hands-on training to district staff in designing customized data entry screens, data entry and analysis that led to the development of district specific reports. In addition, a desktop computer and UPS were provided to each district to facilitate data management. This was followed by mentoring and coaching of district staff in M&E with an aim of improving data management, reporting and use. The HMIS data base was strengthened to integrate HIV/AIDS indicators into the existing databases, populating, and updating it to produce reports and the updating of the district multi-sectoral HIV strategic plan. Three staffs of Kasese district have been selected as National LQAS facilitators and have facilitated a number of LQAS exercises in other districts of Ibanda, Isingiro, greater Bushenyi district (5 districts). The district HIV/AIDS department scored 10 out of 10 in the national assessments and hence Kasese district could serve as a model/hub for other districts in the region to learn from.

Overall, this initiative has demonstrated that despite a multitude of M&E challenges at district level, it’s feasible to strengthen district M&E capacity through a partnership. The success was hinged on full cooperation of the district team, the presence of staff, excellent partner collaboration and involvement from the start including engaging the districts to identify their peculiar needs. M&E capacities have been built, staff trained, and mentored to manage, report, use data. In addition, champions have emerged that provide internal and external capacity building.

There is need for increased district coordination efforts to align and harmonize resources for efficiency and effectiveness. This will further consolidate and harness the M&E technical support. This, coupled with strengthening existing district M&E systems and structures, yields greater results than introducing stand-alone project databases that are not sustainable. It’s critical to introduce M&E modular courses to address district M&E capacity building needs given staff schedules and needs with a view to build on at a later date as their schedules permit.

Establishment of the district HIV/AIDS M&E centers of excellence provides a strong foundation for strengthening national M&E systems. This is achievable with current initiatives like DFID/CDC district HIV response for prevention and improved service delivery. In addition, the draft policy by the Office of Prime Minister to have clear roles, responsibilities, and a vote for M&E activities, once passed will address the current M&E impediments. This will consequently enhance data collection, reporting and use.
Operational definitions

District HIV/AIDS M&E Centres of Excellence (CoE)

A district is defined as an M&E HIV/AIDS Centre of Excellence, if it has systems and competent M&E staff with appropriate tools (manuals, guidelines, software’s and hardwares) that facilitate timely data collection, analysis, reporting and use, drawing on the best practices. The M&E staff should have skills to mentor and coach other people in order to promote learning. The establishment of CoE adopted the World Bank ten model and its four prerequisites for the establishment of results-based M&E systems namely ownership, management, maintenance and credibility.

Prerequisites for the establishment of M&E Centres of Excellence

There are four basic essentials of CoE namely ownership, management, maintenance and credibility.

1. **Ownership:** For a district to be a Centres of Excellence there should be ownership of the M&E systems and champions that stress and promote the need for good data to be generated, shared and properly reported and used. This has to come from every level that uses the system and demand for performance information. This ensures quality control, ownership and maintains the feedback loop and provides motivation for stakeholders to invest in money and time.

2. **Management:** This entails the definition and identification of who will manage the system, how it will be managed and where the system will be managed. The management component requires a clear data flow, clear reporting times, and the type of data. Designing and building an M&E system that can produce trustworthy, timely and relevant information on the performance of an HIV/AIDS program requires experience, skill, and real institutional capacity. The capacity has to include at minimum; the ability to construct indicators, the means to collect data, aggregate, analyse and report on the performance in relation to the indicators and their baselines. In addition managers should have the skill and understanding to know what to do with the information once it’s obtained. This needs to be coupled with minimum statistical capacity and basic information technology to ensure that data is valid, verifiable, transparent and widely available to stakeholders.

   a. Within the management component a district M&E CoE should have an operational M&E unit responsible:
   b. With at least two M&E personnel designated to manage data and generate reports
   c. Availability of appropriate tools including a computer and an appropriate software to facilitate the production of reports
   d. Availability of update guidelines including data flow charts, procedures, data sources report forms, reporting schedules and feedback loops
   e. Availability of at least one M&E staff that can mentor and coach others on data collection, management and report generation for use
   f. Compliance among implementing partners on utilization of agreed upon M&E tools

3. **Credibility:** Valid and reliable data help ensure the credibility of the system, the system need to report all data good or bad. The system should be independent that all stakeholders can trust and have confidence in the data collected. In addition the system should have District HIV/AIDS indicators integrated as part of existing District database and fully populated and updated producing timely reliable reports for use.

4. **Maintenance:** Maintenance is linked to management as it details who will collect what kind of information and when and to ensure that information is flowing horizontally and vertically. Management and maintenance requires creating right incentives and providing appropriate

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1 Jody Zall Kusek and Ray C. Rist, 2004 A handbook for development practitioners- ten steps to a results based M&E system
resources i.e. human, financial, and technical resources. Good maintenance of the system should also take into account new advances in management and technology. Systems and procedures and or technology may need upgrading and modernization. Staff and managers should also be provided with periodic training to keep their skills current. CoE requires constant rebuilding, renewal and strengthening through good management. The CoE at minimum should have a simple M&E Plan with;

a. Agreed indicators, definitions, data sources, district specific baseline HIV/AIDS data, and budget
b. District Multi-sectoral HIV/AIDS Strategic Plans with targets and clarity of responsibilities
c. Linkage between district development plan and district HIV/AIDS strategic plan
d. Integration of district CSO HIV/AIDS activities in the district work plan
e. Evidence data dissemination and use of reports in decision making

Three ones Principle

The principle of “Three Ones” is based on the promise that a comprehensive response to HIV epidemic will be best achieved if there is only one national HIV strategic plan, one national HIV coordinating authority and one national HIV monitoring and evaluation system²

Brief on partners that participated in the establishment of M&E COE

The Joint United Nations Programme on HIV/AIDS (UNAIDS), is an innovative joint venture of the United Nations family, bringing together the efforts and resources of ten UN system organizations (UNHCR, UNICEF, WFP, UNDP, UNFPA, UNODC, ILO, UNESCO, WHO and the World Bank) in the AIDS response to help the world prevent new HIV infections, care for people living with HIV, and mitigate the impact of the epidemic. UNAIDS works very closely with the Uganda AIDS Commission, the National Coordinating entity for HIV and AIDS and actively supports the government and its partners towards reaching the universal targets to prevention, treatment, care and support. UNAIDS focuses on five areas for a more effective response to AIDS namely: mobilizing leadership and advocacy for effective action on the epidemic; providing strategic information and policies to guide efforts in the AIDS response to the epidemic at all levels; tracking, monitoring and evaluation of the epidemic, engaging civil society and developing partnerships; mobilizing financial, human and technical resources to support an effective response.

The Uganda AIDS Commission (UAC) is responsible for multisectoral coordination of Monitoring and Evaluation of HIV/AIDS activities with a core responsibility of providing oversight for the Monitoring, Evaluation and Reporting of National level results of the HIV/AIDS activities elaborated in the National Strategic Plan. The sectors are responsible for quality assurance; sector M&E, policy guidance and technical support supervision. On the other hand, districts are responsible for implementation.

Strengthening TB and AIDS Response in Eastern Uganda (STAR-E) LQAS project is managed by Management Science for Health (MSH) and implementing a United Stated for International Development (USAID) grant. Its goal is to institutionalize LQAS at the national level and to support and coordinate LQAS implementation at the district level.

All official communication to the districts was channelled through Ministry of Local Government. This was intended to avoid confusion and also secure maximum participation and support from all the key sectors. Districts identified core M&E district team that committed time and other resources, participated and championed this initiative.

1.0 INTRODUCTION AND BACKGROUND

1.1 Introduction
This report describes the processes undertaken to establish district HIV/AIDS Monitoring and Evaluation Centres of Excellence (CoE) aimed at demonstrating an operational M&E System at the district. The report provides a background to the HIV situation in the Country, M&E environment at national and district level, challenges in the M&E implementation, justification for CoE, the model behind the establishment of CoE, prerequisites for CoE, accomplishments, recommendations and lessons learnt.

1.2 Background
Monitoring and Evaluation (M&E) for HIV/AIDS interventions in Uganda in general and the districts in particular remains a challenge. Kiruhura and Kasese districts are no exception. Hence the initiative to strengthen the M&E capacity at district level, create demand for the M&E and provide appropriate soft and hardware’s to address the current manual M&E systems that are prone to delays and inaccurate reporting and bound to result into under reporting, double counting and delayed reporting.

The purpose of having the centres is to ensure capacity in M&E for HIV/AIDS at district level, and functional M&E systems working as M&E hubs for other districts in the region to learn from. This initiative will not develop parallel M&E system and tools but build on existing sector-based system by operationalization of the existing district tools that sectors and their partners have already developed and adopted. Areas of support to help make this a reality would include; building capacity to update district strategic plans for HIV/AIDS with targets, responsibility allocation, identified sources of funding and identified funding gaps, an M&E plan for the strategic plan drawn out with defined and agreed upon performance indicators having baseline values, identified and stated reporting formats, a database of indicators maintained / updated regularly and also staff having the ability to support the process of mainstreaming the HIV/AIDS co-ordination structures within the existing structures at the district(s).

1.2.1 The HIV/AIDS situation in Uganda
The HIV/AIDS epidemic in Uganda continues to pose serious public health challenges, responsible for significant morbidity and mortality among adults and children. Furthermore,
the rate of new infections in the country is also still very high, outpacing by far, the rate of enrolment onto ART and chronic AIDS care\(^3\).

Current estimates indicate that over 1.1 million\(^4\) adults and children in Uganda are infected with HIV/AIDS and over 100,000\(^2\) get infected every year (during 2008, an estimated 110,694 new HIV infections occurred countrywide and approximately 61,306 people died from AIDS related illness in 2008)\(^6\). By the end of September 2009, there were 200,213 clients on antiretroviral therapy country wide, slightly over half of those in urgent need\(^7\) (373,836), hence HIV remain a burden, that would necessitate a robust M&E system to track progress at all levels especially district level, where implementation takes place, promote learning and inform HIV programming.

The move towards various reforms such as decentralization, commercialisation and privatisation has increased the demand for M&E at regional and local levels of governments as new Nongovernmental service providers like NGOs, private sector and civil society groups have increased their role in programs that were initially provided by governments. As such, initiatives, that are undertaken have created more need for M&E as indeed governments though may have diminishing roles in providing public good and services, they will still have need to monitor and evaluate the impact of programs regardless of who implements them.

Recent years have witnessed increased support for HIV/AIDS programmes by national governments and Global Health Initiatives including bilateral and multilateral development partners\(^8\). This has led to setting of ambitious national and project goals and objectives with associated performance targets. This support comes with increased responsibility for monitoring and evaluation of HIV/AIDS programmes in order to provide accurate reports through improved tracking of outputs, outcomes, impact and progress towards district, national and international targets. For this reason, the national and districts programmes not only need to have HIV/AIDS strategic plans, but also corresponding monitoring and evaluation plans to track programme performance based on accurate data obtained through robust M&E processes.

\(^3\) Uganda UNGASS Country Progress Report, March 2010
\(^4\) Ministry of Health, Kla ORC Macro Uganda HIV and AIDS Sero-Behavioural Survey 2004-5, Calverton, Maryland
\(^6\) MoH 2009, The HIV/AIDS epidemiological Surveillance report, GoU/MoH/ACP, Kampala
\(^7\) Uganda UNGASS Country Progress Report, March 2010
\(^8\) MoH, 2009 HIV and AIDS Monitoring and Evaluation systems Strengthening exercise in Uganda,
Establishment of District M&E Centres of Excellence

Overall, evaluation cultures and M&E systems have been developed in response to varying degrees of internal and external pressures to demand for results. Accordingly a number of M&E approaches have been developed and used. Despite the varying approaches on the specific sequence in building a results based M&E system, there is consensus on the overall intent. Regardless of the number of steps, the essential actions involved in building an M&E system are; formulate outcomes and goals, select outcome indicators to monitor, gather baseline information on the current situation, set specific targets to reach and dates for reaching them, regularly collect data to assess whether the targets are being met, analyse and report the results for action and continuous learning. The proceeding section provides a review of the M&E systems in the country.

2.0 OVERVIEW OF M&E IN HIV INTERVENTIONS

2.1 Current M&E Environment in Uganda
The Uganda AIDS Commission (UAC) is responsible for multisectoral coordination of Monitoring and Evaluation of HIV/AIDS activities. At UAC, an M&E Sub-Committee composed of various key stakeholders from Government, Non-Government and Development Partners was established in 2005 to guide the national M&E functions. The sub-committee has since played a key role in guiding the development of the Performance Measurement and Management Plan (PMMP) and operational handbook for the NSP (2007/08 – 2011/12). The PMMP outlines 58 national indicators to track the priority areas of HIV&AIDS, however still challenges exist in regard to its effectiveness in meeting and addressing national M&E agenda.

The development of National Performance Measurement and Management Plan (PMMP) – the national M&E plan, was a major step in ensuring that there is one country-level monitoring and evaluation system as articulated by the “Three Ones Principle” for the coordination and management of the response.

M&E of the HIV&AIDS national response has been based on a multi-sectoral approach that was adopted in 1992 and there are a number of players from Government and Civil Society. The key sectors include Ministry of Health (MoH), Ministry of Gender Labour and Social Development (MoGLSD), Ministry of Local Government (MoLG), Ministry of Education and Sports (MoES) as well as Civil Society, Bilateral Agencies and Development Partners.

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9 UAC, 2007 National Strategic Plan
each of which has its own M&E System and Management Information System (MIS). Apart from being multi-sectoral, the national response focuses on the thematic areas of prevention, care and treatment, social support and systems strengthening.

The MoH as one of the key sectors provide leadership for the health sector response to HIV&AIDS by working closely with other partners. The Ministry has a surveillance system and working group responsible for monitoring the public health response and an M&E system as well as Health Information Management System (HMIS). The Ministry has parallel systems for capturing data on ART, Prevention of Mother to Child Transmission (PMTCT), HV Counselling and Testing (HCT) and Tuberculosis that are not part of HMIS. On the other hand, the MoLG has an M&E system the Local Government Information Communication System (LOGICS). However, like the HMIS, it does not capture all HIV indicators for the national response. The MoGLSD has finalized developing OVC indicators, and is piloting OVC MIS in a few selected districts, while the MoES has an Education Management System (EMIS) but, still, not all HIV&AIDS indicators for the national response are integrated in the system.

Indeed progress on strengthening M&E has been made, but more needs to be done. Key documents have been disseminated to districts and sectors based on the multi-sectoral approach. In addition to 58 outcome indicators at national level intended to monitor the national level response, there are 47 output indicators for district level for monitoring service delivery outputs from districts which are supposed to be updated on quarterly basis for district planning and decision making. There are also 29 district indicators for monitoring district level outcomes that are aligned with the national level outcome indicators.

Data collation forms for sectors and districts have been developed and disseminated to districts and sectors as well CSOs, partners and relevant stakeholders. Data is supposed to flow from the communities and facilities through the District local governments to the relevant sectors and converge at the multisectoral level. At the District Local Government level, multisectoral reports are prepared for discussion by the District AIDS Committees (DACs) with feedback to the districts by the sectors and sharing of data at national level during the Joint Annual Review of AIDS activities,

The above mechanisms have largely remained non-functional at district level. For example as a result of failure for these systems to provide timely and reliable data; United States
Government (USG) whose support to the national response accounts about 90% has a separate arrangement system for monitoring the progress the Monitoring and Evaluation of Emergency Plan Progress (MEEPP). To avoid double counting and improve quality assurance, data from MEEPP are usually synchronized with that of MoH and validated before dissemination. CSOs are monitored by the Civil Society Fund Agent (CSF) with clearly articulated CSO indicators with the support from a Financial Management Agency, Deloitte & Touch, to track expenditure in line with approved activities and indicators.

2.2 Challenges in the implementation of M&E System

Much as the M&E systems in place are meant to aggregate data to inform programmes and priorities while guiding delivery of high quality services in the thematic areas by assessing processes, outcomes and impact to measure success, M&E systems face several challenges. While some challenges are intrinsic to the overall context in which programmes are being implemented, others are reflective of the manner in which health services are organized. In some cases, these challenges have limited progress towards a shared vision of a single national M&E system articulated by the “Three Ones” principle for the coordination of the national AIDS response.

As noted in the preceding sections, the country HIV M&E systems are weak. There are multiple reporting efforts at national and district level driven mainly by the need to meet donor reporting requirements as a failure of existing systems to provide the needed information in a timely manner. The country’s capacity to align its reporting requirements has been weak due to several factors including: weak M&E systems within key data sources, underdeveloped and poorly resourced M&E systems at district level, inadequate investment into report production and dissemination processes and lack of update HIV and AIDS performance reports.

2.3 The LQAS and its use in addressing M&E challenges

Lot Quality Assurance Sampling (LQAS)
Lot Quality Assurance Sampling is a method of rapid assessment making use of random sampling to check that the constituents of a population meet certain standards\(^\text{10}\). The quality control method was borrowed from the manufacturing industry for assessing quality of lots (or batches) of manufactured products\(^\text{11}\) that was used in the 1920s. A production supervisor would inspect a small representative random sample drawn from a recently manufactured lot from a production line. The interest was to ensure that the quality of products released from the production line meets a certain set standard. If the number of defective goods in the sample exceeded a certain number, the lot would be rejected. The number of acceptable defects was based on a production standard for a statistically determined sample size. Like every sample, there is however a chance of error or risk of rejecting a good batch or accepting a sub-standard one commonly referred to as type I and type II errors. The sample size is set to minimize the type I and type II errors. The user needs to identify 2 thresholds the upper and the lower threshold. The upper threshold is the coverage target for the year and the lower one is the level below which is not acceptable for a product to be.

**Usefulness of LQAS**

Lot Quality Assurance and Sampling was used at district and sub county level to identify priority areas or indicators that are not reaching the agreed target\(^\text{12}\). Before using LQAS, the users were trained. The trainings were aimed at building capacity for M & E at the level of interest, establishing data against the indicators so as to facilitate planning and monitoring for HIV/AIDS response among others, identify critical geographical locations that are poorly served and also population groups in need. In 2002 prior to the employment of the LQAS survey methodology in Uganda, up-to-date district level health behavioral data was difficult to find. One would have to depend on the Uganda Demographic and Health Survey (UDHS) report which gave national or regional level data but never district specific. Due to high cost of the UDHS and its national level coverage, it was not possible to employ big enough samples that would yield statistics that were district specific. Further to this, sentinel surveillance data had also had gradually become less timely. The main focus of implementing LQAS has been on TB, HIV/AIDS and STIs and Immunisation due to the funding sources. Office of the Prime Minister (OPM) also recognizes LQAS as a useful survey tool to generate information for outcome indicators thus promising to support LQAS beyond the funding

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\(^{10}\) Susan E. Robertsona, Joseph J. Valadezb, Global review of health care surveys using lot quality assurance sampling (LQAS), 1984–2004

\(^{11}\) Stacy Hoshaw-Woodard, Ph.D. Description and comparison of the methods of cluster sampling and lot quality assurance sampling to assess immunization coverage -

\(^{12}\) UPHOLD, National LQAS Workshop Report: Enhancing Evidence Based planning at district level : The LQAS experience, 2006, Kampala.
projects. USAID also promised to support LQAS a step further. In view of this, LQAS was adopted for use in Kasese and Kiruhura districts to address the districts of lack baseline data to inform their strategic planning processes as the national survey results had limited and delayed reach, broken down only to sub regional levels and not districts.

2.4 Purpose of establishment of Centres of Excellence
In order to contribute to addressing the M&E challenges in the Country, UNAIDS in a collaborative support arrangement with the Ministry of Local government, Uganda AIDS Commission, Makerere University School of Public Health/CDC HIV/AIDS Fellowship Program and Management Sciences for Health/STAR-E LQAS, piloted the establishment of two district HIV/AIDS M&E centres of excellence in Kasese and Kiruhura to demonstrate a functional M&E system for learning and replication to other districts. The CoE purposed to build capacity in M&E for HIV/AIDS at district level, strengthen district data management system, facilitate timely generation of baseline data and ensure a functional M&E system working as hubs for other districts in the region to learn from.

2.5. Goal and Objectives of the intervention
The Goal of the intervention was to demonstrate the establishment of district M&E hubs for learning and replication

The specific objectives were:

i. To build the capacity in M&E for HIV/AIDS at district level and create learning centers for scale up to other districts.

ii. Strengthen district M&E systems to track and produce timely quality data

iii. To facilitate district obtain specific baseline values and update their multi-sectoral HIV/AIDS strategic plans HIV/AIDS/M&E plan with indicator definitions, baseline values, and develop consensus on the annual targets

2.6 Scope/ coverage of the intervention

In order to ensure greater success in view of the time, manpower and other resources, in consultation with the Ministry of Local Government, Uganda AIDS Commission,
MSH/STAR-E LQAS it was agreed to initially concentrate on two districts of Kasese and Kiruhura out of the original 10 districts that were selected.

The key elements in consideration of the districts were: districts without functional M&E systems characterised by un-reliable and outdate district HIV/AIDS status data, least knowledgeable in LQAS. In addition Kasese had just developed her five year strategic plan and needed support to obtain baseline values to facilitate target setting; also being a boarder district had unique characteristics to learn from.

On the other hand Kiruhura being a new district with basically no M&E systems would provide an opportunity to learn from by establishing an M&E system from scratch. In addition it would be able to learn from Kasese. The selection criteria was also informed by the initial visits where the two districts indicated their commitment to support the initiative, ensure that their staff would be available to engage in the entire exercise up to end, and their willingness to train others in the districts and with potential to support their neighbours in M&E.

2.7 Justification for Centres of Excellence
Despite the enormous challenges associated with designing, building and sustaining an M&E system at the district level, it still remains a serious undertaking that can be achieved on pilot basis, in a phased manner and over a period of time as districts are in dare need of good M&E systems to enable them monitor their own performance and take appropriate actions. Consequently assisting local governments in achieving this capacity merits the time and attention of key partners namely MoLG, UAC, UNAIDS and MSH as the CoE are a key component of the human capital and transformation dimensions of district HIV/AIDS decentralized response.

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13 Given that MSH/STAR-E is covering the districts in the East and NUMAT those in the North while STAR-EC is covering part of the districts in the Central and East with similar interventions to those proposed by UNAIDS

14 Kasese located in western Uganda became a district in 1974 is bordered to the North by the district of Bundibugyo, the North East by Kabarole, to the South East by Kamwenge, to the South by Bushenyi and to the West by the Democratic Republic of Congo. It has a surface area of 3,389.8 sq.km of which the total land area is 2,911.3 sq.km, with total area of water bodies being 409.7 sq.km and the total area for wetlands 68.8 sq.km. The administration is comprised of the district headquarters, a municipal council, 20 rural sub counties and 3 town councils. There are 4 health sub districts with a government hospital and 2 NGO supported hospitals. Sero prevalence stands at 11.2% (HMIS 2009). Kasese is a boarder district having had the effects of the ADF war. High risk groups: fishing communities, mining town dwellers, poor (58% below poverty line).

15 Kiruhura is one of the newly created districted having been curved off Mbarara district. It lies in the South Western region of Uganda bordering with; Kyenjojo, Kamwenge, Ibanda in the North, Sembabule, Lyantonde in the East, Rakai and Isingiro in the South and Mbarara in the West. It covers an area of 4,605 Sq. Kms, with a population of 250,000(Proj. 2002 census) with two Counties of Nyabushozi and Kazo that make up the two Health Sub Districts. The district has 12 sub-counties and a town Council. HIV prevalence stands at 11.9% (HMIS 2009). The major economic activity is cattle keeping.
It is envisaged that such centres will stimulate sustained distinction in M&E while simultaneously generating highly qualified M&E resource capacity in order to improve district M&E systems and work as regional M&E learning centres for other districts. The establishment of CoE will adopt the ten-step World Bank model to designing, building and sustaining results-based Monitoring and evaluation system. This initiative provides an opportunity to enable districts collect specific HIV/AIDS data, using the strengthened district routine M&E systems and Lot Quality Assurance Sampling methodology.

3.0 APPROACH USED IN THE ESTABLISHMENT OF COE

3.1 Introduction
There are various approaches for the design of M&E systems and hence establishment of M&E CoE including the UNAIDS 12 components M&E strengthening tool, the World Bank ten step model, developing M&E systems for complex organisations, design M&E systems for NEPAD projects, the Results based management system, key steps in designing and implementing and evaluation process for individual Country service agencies however this intervention zeroed down on the World- Bank ten approach.

3.2 Adoption of the World Bank ten-step Model
Results based M&E has become a global phenomena as international, national and districts stakeholders in the development process have sought increased accountability, transparency, and results from governments and organizations in view of the demand for tangible results.

In view of this, the establishment of CoE adopted the ten-step World Bank model to designing, building and sustaining results-based monitoring and evaluation system. The choice was premised on the fact that the model provides extensive details on how to build, maintain and sustain a result based system. It further differs from other approaches in that it contains a unique readiness assessment, the foundation of the M&E system which need to be conducted before the actual establishment of a system. Overall the model highlights the political, participatory and partnerships processes involved in building and sustaining M&E systems i.e. the need for consultation and engagement of all stakeholders in the entire process. It’s further noted that though the model is a ten step it’s not strictly linear and
sequential and thus may require an iterative processes with some degree of adaptability and flexibility and with possibilities of working on several steps simultaneously.

Studies\textsuperscript{16} have shown, that the implementation of results based framework may take an enclave and or mixed approach given the magnitude of challenges associated with complete M&E system set up, overall piloting of M&E systems is often recommended for example in Albania the implementation was aligned to a new program to see how it works, and piloting in four government ministries, while Egypt opted for pilot in six departments to explore how it works before applying the approach to the government as a whole. Success factors\textsuperscript{17} in building M&E systems included demand and ownership for systems, political and technical support, champions within the organizations, and competent team of staff, efficient administrative systems and institutions.

The framework in the fig1 below, describes a step by step in the establishment of Centres of Excellence with some activities being implemented soon after the fellowship program.

\textbf{Fig1: Theoretical framework for developing district M&E centres of excellence: Adoption of the World Bank Ten Steps to designing, building, and sustaining a Results-Based Monitoring and Evaluation System}

\textsuperscript{16} World Bank 2001 c, \textsuperscript{17} Furubo, Rist and Sandahl 2002, P.16
3.3 Process of establishment of district HIV M&E Centres of excellence

This section describes the step-by-step progress in the establishment of CoE as adopted from the 10-step World Bank model in designing, building and sustaining results based M&E system.

Establishment of District M&E Centres of Excellence
3.3.1 Conducting a readiness assessment

A joint team from UAC, MoLG and UNAIDS undertook a rapid consultative meeting with districts to re-orient them on the district M&E processes and build consensus on key M&E areas for strengthening.

These were held in the ten districts of Busia, Soroti, Moroto, Gulu, Yumbe, Masindi, Mubende, Kasese, Kabale and Kiruhura to establish their level of M&E processes, identify key M&E gaps and develop consensus on the areas for strengthening. The overall goal of this support was to assist these districts become centres of Excellence in HIV/AIDS M&E.

Following the district M&E consultative meetings, it was apparent that most of the districts had data gaps for their district HIV strategic plans baseline values and other key district specific information that could not be obtainable from the existing and/or routine data sources.

In addition the assessment noted inadequate M&E capacities, poor appreciation and understanding of the role of M&E, existence of number of data collection tools and unharmonised data flows and reporting mechanisms, inadequacy and untimely production of comprehensive AIDS status reports, double counting, under reporting of the district achievements, disconnect between M&E work of district and use of such information in the district budgeting process. Overall there was great need and commitment from districts to strengthen their M&E systems.

It was thus agreed that Lot Quality Assurance sampling (LQAS) be undertaken in the two districts of Kasese and Kiruhura to build the capacity of district and sub county level HIV/AIDS stakeholders in M&E and enable them to generate district HIV/AIDS specific information on key program indicators.
3.3.2 Obtaining district specific HIV/AIDS baseline data on indicators

In order to develop the situation analysis for the strategic plan, data on various district level indicators needed to be collected and analysed. Also LQAS implementation was purposed to train the central level partners and the district local government staff in planning and implementing the LQAS methodology thus equipping them to support the national level and the district regions as centers of excellence in M&E. Prior to LQAS implementation, consultative meetings were held to develop consensus on partner’s outcome indicators of interest and adoption of survey tools\textsuperscript{18}, in addition to Training of Trainers. This was followed by a three week\textsuperscript{19} phased exercise.

Lot Quality Assurance Sampling was employed in the two districts of Kasese and Kiruhura to build the capacity of district and sub-county level HIV/AIDS stakeholders in M&E and enable them to generate district HIV/AIDS specific information on key program indicators. The intention was to expose the partners to the LQAS simplified M&E methodology, that is expected to subsequently lower the cost of generating indicator values for measuring implementation progress of the district’s response to the HIV/AIDS problem.

The key activities undertaken included; re-consensus on survey indicators, preparation, pre-test questions and translation of key terms, editing the data collection tools, selection criteria for villages, households, respondents and trainees, training of LQAS Trainers, training the districts partners in LQAS methodology, data collection exercise and quality assurance, training in manual analysis, preliminary report production and sharing. The subsequent section provides the usefulness of LQAS, its application in Uganda and concludes with the next steps in ensuring that the district strategic plans are updated with the baseline data.

3.3.3 Agreeing on outcomes to monitor and evaluate

The two districts were at different stages in the development of their HIV/AIDS strategic plans; the development of the district strategic plans was aligned to the National HIV/AIDS strategic plan 2007/8-2011/12. The strategic plan details the key outcome to monitor and evaluate. The development process benefited from consultations with key stakeholders in the

\textsuperscript{18} During the training(s), the participant training guide version 2007 and the trainer’s instruction guide version 2001 were used with some adaptations from the UAC and STAR-E LQAS experience(s). Actually the basic model that was used was that coined by STAR-E LQAS. This included the district selection criteria of data collectors and supervisors, indicator listings, data collection tool(s), session time tables, participant commitment letters and data cleaning guidelines.

\textsuperscript{19} In order to be sure that a person was confident with LQAS, one needed to complete the first week of training, go and collect data for a week and then return for the hand tabulation exercise.
districts in the identification of stakeholders needs, peculiar district desired outcomes and
identification of strategic priorities and their linkage to the national strategic plan.

### 3.3.4 Selecting key indicators to monitor outcomes

The exercise of indicator selection was informed by the already agreed upon national and
district level outcome and output indicators during the district strategic planning process.
Consensus was reached on the identification of district indicators for all levels of the results
based M&E system. There are 29 district indicators for monitoring district level outcomes
that are aligned with the national level outcome indicators in addition to 47 district output
indicators for monitoring service delivery outputs from districts that require update on
quarterly basis for district planning and decision making.

### 3.3.5 Consensus on survey indicators and preparation, pre-test questions and translate
key terms

This involved identification and compilation of the HIV/AIDS, TB and Malaria indicators on
which the LQAS survey focused. The key source documents included the district outcome
indicators in the National Performance Measurement and Management Plan (PMMP) for the National HIV/AIDS
Strategic Plan (NSP) for HIV/AIDS, The National Strategic Programme Plan of Interventions (NSPPI) for Orphans and
Other Vulnerable Children and the Health Sector Strategic Plan (HSSP). The survey questions depended on the
selected and agreed upon survey indicators.

Based on the identified indicators, STAR-E LQAS data collection tools that were prepared,
discussed with stakeholders, field pre-tested and used in November and December 2009 in
the districts of Pallisa, Sironko, Busia and Butaleja were adopted. Pre-testing of the tools and
translation of key terms with Kasese and Kiruhura districts HIV/AIDS partners was
undertaken two weeks prior to the training in LQAS methodology.

### 3.3.6 Sample Selection of Supervision Areas (SA)s and interview villages

In consultation with the district planning units and Health departments, each of the districts
was divided into five logical administrative areas along existing sub counties and based on
the lists of local councils (LC) from the district; the locations of the interview areas were
randomly identified.
3.3.7 Setting criteria and selection for district trainees
The selection criteria were shared with the districts to identify the trainees (interviewers and local supervisors), districts submitted the compiled lists two weeks before the training to the Ministry of Local Government. In turn the Ministry communicated to the districts through the Chief Administrative Officers about the training venue and the training dates and request to release their staff for the three week exercise.

3.3.8 Training of Trainers in LQAS methodology
A Training of Trainers (ToT) of 5 people was held between 16th to 18th March, 2010 at UNAIDS offices, aimed at exposing the members to the LQAS simplified monitoring methodology and the available resource(STAR-E LQAS) in supporting the implementation of LQAS by building local capacity of the partners. The 5 National facilitators’ were trained in LQAS methodology to equip them with relevant skills to facilitate district level LQAS trainings, as part of capacity building these were drawn from the participating partners UNAIDS, UAC, MoLG and MSH/STAR-E LQAS.

This was followed by a district level training of 46 district staff in LQAS; data collection and the hand tabulation and analysis workshop as detailed in the proceeding sections. One needed to complete the first week of training, go and collect data for a week and then return for the hand tabulation exercise in order to be sure that a person was confident with LQAS methodology.

3.3.9 Training of 46 district staff in LQAS methodology
The first week involved building the capacity of 46 district staff in LQAS methodology, the selected district participants were trained in baseline surveys, LQAS survey methodology, sample selection procedures, interviewing skills, and M&E concepts at a location outside their mother district for maximum concentration work output in a residential setting.
During the trainings, the LQAS participant training guide version 2007 and the trainer’s instruction guide version 2001 were used with some adaptations from the UAC and STAR-E LQAS experiences. The basic model that was used was that coined by STAR-E LQAS and included district selection criteria of data collectors and supervisors, indicator listings, data collection tools, session time tables, participant commitment letters and data cleaning guidelines.

Field pre-test in Biharwe, Mbarara district
The training had a day of field practice that was carried out in two villages in Biharwe parish, Mbarara on the 4th day of the training. The participants were divided into 8 teams. They spent the whole day in the community practicing: the development of a village map, updating a village list and, randomly sampling a start household and conducting interviews.

3.3.10 Data Collection Exercise
The training was followed by a five-day data collection exercise where the LQAS trainees collected data from their respective districts as per the data collection plan developed during the training.

Each of the districts was divided into five supervision areas, and each supervision area had a district supervisor, a DHT member, two data collectors and each interviewer had a local village guide for each village of interview. At the end of 5 days each of the supervision areas had a complete set of 19 data sets for the main survey and PHA data. The Supervision Area supervisor ensured that the filled in questionnaire were accurate before appending his/her signature and handing it over for data tabulation.

The respondents of interest were orphans 5-17 years, mothers with children 0-11 months, young persons 15-24 years both female and male, women 15-49 years, men 15-54 years and PHAs 15-55 years. After data collection the trainees from the two districts reconvened at a central location for hands on training in manual data analysis.
3.3.11 Hand tabulation (manual analysis) workshop

After data collection, all the filled questionnaires were brought to the central data tabulation analysis workshop for hands on training that covered quality checking, tally of results, summary of tally results, and identification of the well and poor performing areas and indicators, and creating a district report with action plan.

The hand tabulation workshop started with the presentation of reports on what went well in the field, challenging situation, how they were addressed in the field and future aspects to be addressed during LQAS implementation. The output of the five days was summary of findings from the questions asked and a component of a district report showing an analysis of the findings and also the identified gaps made by Supervision Area and overall the district.

3.3.12 Designing customised data entry screen

Each of the districts identified five people to attend a five day workshop in Kasese where participants were trained in designing data entry screens, data entry, management and analysis. Kasese hosted the training because it has a computer centre and provides as an opportunity for learning as it’s an older district with some M&E systems compared to Kiruhura. The entry screens were designed in MS Access the trainees first coded the questionnaires. 9 district HMIS staff were trained in data management and are currently undertaking data entry that will feed into the updating of district HIV/AIDS Multisectoral strategic plans.
customized data entry screens designed to enter LQAS data collected in Kasese and Kiruhura districts; district staff trained and coached on the entry screen and backstopped data entry processes at the district level.

3.3.13 Data entry, management, report production and dissemination

Upon completion of the training, the trained staff entered data at their respective data sets at duty stations. This was followed by data cleaning, analysis and report writing. The entire process involved the district staff enhancing mentorship and coaching to enhance district capacity and create ownership of the data and findings. The findings were presented to district stakeholders that discussed the findings and agreed on key baseline values and actions and this informed the revision of the Kasese 5 year district HIV/AIDS strategic plan.

4.0 Intervention outcomes

The establishment of district M&E centres of excellence was highly participatory, working with various district teams and civil society organizations to obtain broad consensus using exiting structures and tools. The initiative highly hinged on revitalisation of the existing district M&E systems and developing/re-activating district databases and populating them with HIV and AIDS indicators.

There were two major outcomes as a result of establishment of district M&E Centres of excellence namely strengthened capacity of district teams in data management and M&E in general and improved quality

**Summary of key results**

- 46 LQAS experts – three from Kasese have been selected as National LQAS facilitators, and have facilitated LQAS in eight districts.
- 20 Kasese HMIS/medical record officers trained in M&E and action plans developed for improving data quality at their facilities.
- Increased coordination, participation and ownership of the district HIV response by partners.
- Strengthened systems and competent staff with appropriate tools including the revision and update of the 5 year district multi sectoral strategic plan.
- The district HIV/AIDS department scored 10 out of 10 in the national assessments.
Establishment of District M&E Centres of Excellence

and availability of HIV/AIDS data.

4.1 **Strengthened capacity of district teams in data management and overall Monitoring and Evaluation.** The capacity development efforts targeted the individual, the systems and the organisation/ district level.

#### 4.1.1 Training of district HMIS and Records staff in data management

In order to increase appreciation for M&E and build capacity, 20 district HMIS/Records staff including the Statistician, the DFPO, Biostatistician were trained in Monitoring and Evaluation, routine data management, and supportive supervision, data auditing/data quality assurance and data dissemination and information use. This training took opportunity to re-orient and build consensus with district staff and CSOs on use of sector reporting tools, report formats, and reporting process.

Similarly, the HMIS team at district level was mentored, coached and customized the MS Excel surveillance sheets for HIV/AIDS, ANC and Malaria, to automatically produce quarterly and annual summaries. This facilitated the integration and updating of HIV/AIDS into existing district databases. This was complemented with a desktop computer and UPS to support data management and reporting.

#### 4.1.2 Training of 46 district staff in LQAS methodology

The capacity of 46 district staff in LQAS methodology were strengthened, the selected district participants were trained in baseline surveys, LQAS survey methodology, sample selection procedures, interviewing skills, and M&E concepts at a location outside their mother district for maximum concentration work output in a residential setting. The trained district staffs used the knowledge gained to collect data, analyse, prepare reports, present the findings to district technical and political leaders and used the finds to revise and refine their 5 year strategic plan. In particular, three members of LQAS team in Kasese have been selected as national LQAS facilitators and have facilitated LQAS exercise in a number of districts.

#### 4.1.3 Capacity building for national Training of Trainers: five national level trainers drawn from key agencies namely UAC, MoLG, UNAIDS and MSH/STAR were trained in LQAS methodology and these facilitated LQAS implementation in the two districts, these capacities do exist and have further facilitated a number of LQAS activities beyond the two
districts of Kasese and Kiruhura and they are part of the national LQAS Technical working group that reviewed the national indicators that should be captured routinely for aggregation to inform national and international reporting.

Other dimension of capacity building included the engagement of both political and technical teams in identification of their priority M&E needs, and consensus on key indicators to measure and targets.

4.2.0 Improved quality and availability of HIV/AIDS data;
The establishment of district M&E centres of excellence enabled the district to obtain timely, reliable district specific data that better informed the decision making process and flagged-out changes that needed action. In addition LQAS provided baseline data that provided a basis for consensus on setting targets that ultimately informed the revision and update of the district five year multi-sectoral strategic plan.

4.2.1 Updating Kasese District Multi-sectoral HIV/AIDS Strategic Plans.
This built on the point that “M&E is not simply to generate continuous results based information but to get that information to the appropriate users in a timely fashion so that the performance feedback can be used to better manage the HIV response”. As described earlier a dissemination meeting was held to share information, and build consensus on the findings to facilitate the agreement on the annual targets. The findings created interest and demand for the information and use of information for learning and scale up of interventions including incorporation of lessons learned into new programs. This information further formed the updating of district multisectoral plan with baselines values.

As noted earlier, Kasese had developed a strategic plan, but lacked the baseline values upon which to base their planning and development of action/annual rolling plans. Upon the presentation, dissemination and building consensus of the findings, a series of meeting of key district stakeholders was held and updated the strategic plan with baseline values and developed consensus on the annual targets and integrated operational plans as the main vehicle to operationalise the strategic plans.

5.0 Limitations
There were notable challenges during the implementation that need to be taken cognizant of for future similar interventions namely;
There was varied commitment and participation across the district, and this greatly determined the pace and speed of intervention implementation, a district that fully committed its staff and resources witnessed more outcome interventions.

This intervention involved a number of players and their involvement, respect of mandate and roles meant a slow and all inclusive process that at times would drag the process of implementation.

There are varied capacities at district level in terms of number and technical, and this greatly impacts on the district capacity to fully participate, this is worse off especially with the newly created districts that have fundamental human resource challenges.

Districts remain faced with challenges of inadequate funding, and this by implication means that some districts find it almost impractical to commit some catalytic funds to sustain a few processes in regard to operational M&E.

6.0 Lessons learnt
Developing an M&E system within a decentralised setting though doable it requires a careful appreciation of key lessons learnt that might help address some of the more common challenges.

Establishment of an excellent partnership for the strengthening of district M&E systems requires balancing the needs, processes, procedures and mandates of key partners and accordingly this initiative has demonstrated that it’s feasible to strengthen district M&E capacity through partnership and stakeholder engagement and consolidation despite a multitude of M&E challenges at the decentralised environment.

Once the team strengthening an M&E system are not part of the senior technical management team then it is almost always essential to get buy-in early. Without the support of senior management at different levels an M&E system is unlikely to be effective. Senior management can easily undermine a system. On the other hand, if they lend it their full support the effectiveness of an M&E system can be greatly enhanced.

Getting technical and political buy-in early is not only politically useful, but also avoids the dangers of interference at a later stage. The introduction of an M&E system almost always has wide implications for an organisation, and it is only natural that senior managers should seek to ensure that they are part of the decision-making process. If you do not make sure their views are heeded at an early stage, you run the risk that they will want to make major changes once a system has been developed and is about to be rolled out, or worse once training on the system has already begun.

Clarity on the authority to change is critically important, as some areas of work clearly fall within the jurisdiction of those responsible for M&E, while other areas, such as planning processes, reporting formats and data storage systems are shared areas and in view that HIV/AIDS is crosscutting at district level, positioning of M&E support in the planning unit, provides more leverage to ensure that all key districts departments are coordinated and their
input integrated into the districts work plans and budgets and later the district development plan.

Don’t feel that you have to make everyone happy. Within development circles, participation is almost universally considered to be a positive thing. To a point this may be true when developing an M&E system. But there is a danger that when too many people are involved in designing a system it ends up trying to be all things to all people, and loses coherence as a result. When carrying out consultations it should be emphasised that whilst different views will be considered it is not always possible to make changes to one area of an M&E system without having significant knock-on effects in other areas. If it is to be made simple at the point of use then the design team needs to be allowed to get on with the job without having to cater to every comment and suggestion, no matter how ill-informed. As a systems designer it is important to be able to say ‘no’.

Try to reduce unrealistic expectations. Sometimes, people think that a new M&E system is going to solve all of an organisation’s problems. They are led to believe that it will enable management to make accurate and timely decisions based purely on the analysis of M&E information, or that enhanced M&E will enable an organisation to be fully accountable to different organisations at a range of different levels. But even with the best system there is a limit to what M&E can achieve, and it is important to be clear about those limits right from the start.

Similarly, if too much is promised from an M&E system then people working at programme or project level is bound to be disappointed. If people are told that a new M&E system is going to change their lives then they are inevitably going to be resentful when it doesn’t. In fact, a new M&E system might make an organisation more professional, but for the individuals within that organisation it could mean extra work for no immediate reward (as the rewards might accrue to people subsequently joining the organisation). It is usually better to be as honest as possible from the outset, and to explain clearly how the new M&E system might affect people’s workloads.

Try to take away as much work from people as you can. It is natural for people to resent new policies, practices and procedures, particularly when they have spent a lot of time and effort learning the old ones. When asking people to carry out new work it is always helpful to be able to take away some of the old work. This can actually be quite difficult. As mentioned earlier, however bad a template, form, tool or process you can guarantee that someone will rely on it and will kick up a fuss when it is removed.

Design the system fully before carrying out training. M&E systems should be simple at the point of use even if they are complex overall. But people carrying out training should fully understand how the system is intended to work in different ways at all levels so that they can resolve issues or address concerns. This is impossible to do if the system is rolled out before the design stage has been completed. Bitter experience has taught the dangers of going into a workshop hoping to gloss over details of how a system will work.
Finally, when designing a new system you should be brave and innovative. Davies (1995) refers to what he calls the ‘fate’ of many M&E systems, which seem to slide inevitably from extensive attention in the detail of setting them up to modest concern for data generation, less interest in the use of that data and ultimately a minimal interest in it as an instrument of evaluation. Indeed many senior practitioners and academics within M&E circles remain unconvinced that the majority of complex organisations M&E systems actually enable them to measure the results of their work. If this is true, then there is little to be gained by adopting a conservative, traditional approach over a more radical one. It is better to be brave and design something new that might work than to stick to tried and tested methods which will be guaranteed to replicate old flaws.

7.0 Conclusions

Overall, districts have built their M&E capacity, and enables them to generate district HIV/AIDS specific information on key program indicators through Lot Quality Assurance sampling (LQAS), with a pool of 23 HIV M&E excerpts in each of the two districts, in addition each of the district has been able to obtain district HIV/AIDS, TB, Malaria data that to fill in their PMMP district level baseline values and other key district specific information that could not be obtainable from the existing and/or routine data sources. With the current and most recent district specific HIV data, districts have been able to identify areas that are not reaching the agreed target, and this has enabled local lower level managers to monitor the performance of their programs at an affordable cost and to facilitate planning and monitoring for HIV/AIDS response among others, identify critical geographical locations that are poorly served and also population groups in need.

Overall, this initiative has demonstrated that despite a multitude of M&E challenges at district level, it’s feasible through a partnership to strengthen district M&E capacity. The success was hinged on full cooperation of the district team, the presence of staff, excellent partner collaboration and involvement from the start including engaging the districts to identify their peculiar needs. M&E capacities have been built, staff trained, mentored to manage, report, use data. In addition, champions have emerged that provide internal and external capacity building.

Use of district technical staff and HIV/AIDS partners in data collection, analysis and report production enhances ownership and LQAS provided a learning opportunity for district personnel

8.0 Recommendations for sustaining M&E system at the district level

Hatry, 1999; notes the following as key challenges associated with sustaining the M&E systems namely personally training needs, overall system cost and feasibility, agency priorities, maintaining indicator stability over time, consensus on who will do what, fear and resistance from program managers, participation by all key stakeholders, aggregation of outcomes across programs, community wide versus program specific outcomes and organizational politics. UNDP, 2002 notes that a monitoring and evaluation framework that
generates knowledge, promotes learning and guides action is, in its own right, an important means of capacity development and sustainability of results.

This initiative have focussed on making money work for greater impact by helping the districts to come up with tools to enable them to mobilize and effectively utilize resources by incorporating key M&E activities will in the district work plans. Further efforts included;

**Promotion demand for the system:** There has been engagement of the stakeholder’s right from needs identification to date, including district political and technical staff. This has enabled stakeholders at every level appreciate the needs, stimulate their interests for them to demand and use the results/information take. Further the use of district staff in designing their study, undertake analyze, discuss the findings and use the findings to update the strategic plan has and development of operational plan been critical in creating ownership. In addition, a core team has been identified, trained and mentored and empowered to take charge of analyzing and reporting information.

Through engagement of district technical and political staff and other capacity building initiatives, this has worked as an Incentives for the team to appreciate and demystify the importance of data and M&E system; and hence ensured organizational learning and offered stimuli that encourage M&E officers and primary stakeholders to appreciate the usefulness of M&E and not as a bureaucratic task, but as an opportunity to discuss problems openly, reflect critically in order to learn what changes are needed to enhance impact

**Specific recommendations**
Local governments will need to commit continuing financial resources to upkeep and management of the system; institutional experience and memory are also helpful in the long term sustainability of these systems. To further note, that there are some resources in the districts and this requires coordination of partners to ably contribute to agreed upon priorities.

There is need for increased district coordination efforts to align and harmonize resources for efficiency and effectiveness. This will further consolidate and harness the M&E technical support. This coupled with strengthening district M&E existing systems and structures yields greater results, than introducing stand-alone project databases that stop as soon as the project expires. It’s critical to introduce M&E modular courses to address district M&E capacity building needs given staff schedules and needs with a view to build on at a later date as their schedule permit.
References

Global Fund Inspector General, Sept 2009: Follow-up review of the grants to Uganda
MoH, Kla ORC Macro Uganda HIV and AIDS Sero-Behavioural Survey 2004-5, Calverton, Maryland
NUMAT, 2009; A Household Survey on Malaria, HIV&AIDS and TB Interventions in Nine Districts of Northern Uganda
Ray C.Rist Jody Zall Kusek, 2004 Ten Steps to a Results-based Monitoring and Evaluation System
Stacy Hoshaw-Woodard, Ph.D; 1984-2004: Description and comparison of the methods of cluster sampling and lot quality assurance sampling to assess immunization coverage -
Susan E. Robertson, Joseph J. Valadez, 1984–2004: Global review of health care surveys using lot quality assurance sampling (LQAS)
UNGASS, March 2010: Uganda UNGASS Country Progress Report
UPHOLD, 2006: National LQAS Workshop Report: Enhancing Evidence Based planning at district level: The LQAS experience, Kampala.
Annex I: Kasese and Kiruhura district HIV/AIDS, TB, Malaria baseline values as per the selected indicators:

Section 1: HIV counselling and testing

<table>
<thead>
<tr>
<th>Indicator Ref No.</th>
<th>Performance Indicators</th>
<th>Kasese (N)</th>
<th>Kiruhura (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UNAIDS1:</strong> Aggregated indicators (%) over five population groups (with 95% confidence limits)</td>
<td></td>
<td>91.8</td>
<td>77.3</td>
</tr>
<tr>
<td><strong>Kasese N=475</strong></td>
<td></td>
<td>(89.3-94.3)</td>
<td>(73.5-81.0)</td>
</tr>
<tr>
<td><strong>Kiruhura n=475</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Percentage of individuals who know where they can be tested for HIV</td>
<td></td>
<td>60.2</td>
<td>64.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(55.8-64.6)</td>
<td>(60.1-68.7)</td>
</tr>
<tr>
<td>1.2 Percentage of individuals who know two or more benefits of HCT</td>
<td></td>
<td>60.2</td>
<td>64.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(55.8-64.6)</td>
<td>(60.1-68.7)</td>
</tr>
<tr>
<td><strong>UNAIDS2:</strong> Aggregated indicators (%) over three population groups (with 95% confidence limits); Men, Women and Youth</td>
<td></td>
<td>55.26</td>
<td>40.52</td>
</tr>
<tr>
<td><strong>Kasese N=380</strong></td>
<td></td>
<td>(50.3-60.3)</td>
<td>(35.6-45.3)</td>
</tr>
<tr>
<td><strong>Kiruhura n=380</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3 Percentage of individuals who have ever been counselled and tested for HIV</td>
<td></td>
<td>21.58</td>
<td>15.26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(17.4-25.7)</td>
<td>(11.6-18.9)</td>
</tr>
<tr>
<td>1.4 Percentage of individuals who have ever been counselled tested and received their HIV test results</td>
<td></td>
<td>39.74</td>
<td>22.89</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(34.8-44.7)</td>
<td>(18.7-27.1)</td>
</tr>
<tr>
<td>1.5 Percentage of individuals who were counselled and tested for HIV in the last 12 months</td>
<td></td>
<td>39.21</td>
<td>25.26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(34.3-44.1)</td>
<td>(20.9-29.6)</td>
</tr>
<tr>
<td>1.6 Percentage of individuals who were counselled and received an HIV test in last 12 months and know their results</td>
<td></td>
<td>85.26</td>
<td>54.74</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(78.1-92.4)</td>
<td>(44.6-64.8)</td>
</tr>
<tr>
<td><strong>Indicator of counseling and receipt of results (%) among women with children less than 1 year old (with 95% confidence limits)</strong></td>
<td></td>
<td>6.53</td>
<td>11.37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(4.8-11.1)</td>
<td>(7.3-13.4)</td>
</tr>
<tr>
<td>1.7 Percentage of mothers of children (0-11 months) who were counseled and received an HIV test during the last pregnancy and know their results</td>
<td></td>
<td>53.68</td>
<td>53.47</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(49.2-58.2)</td>
<td>(49.0-58.0)</td>
</tr>
<tr>
<td><strong>Section 2: Prevention of mother to child transmission of HIV; NAIDS3:</strong> Aggregated indicators (%) of PMTCT (with 95% confidence limits)</td>
<td></td>
<td>6.53</td>
<td>11.37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(4.8-11.1)</td>
<td>(7.3-13.4)</td>
</tr>
<tr>
<td>1.8 Percentage of individuals who were tested for HIV and received their result as a couple</td>
<td></td>
<td>30.2</td>
<td>29.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(24.9-35.5)</td>
<td>(24.5-35.1)</td>
</tr>
<tr>
<td>1.9 Percentage of individuals who were tested for HIV and received their result and disclosed to their Spouse</td>
<td></td>
<td>6.53</td>
<td>11.37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(4.3-8.8)</td>
<td>(8.5-14.2)</td>
</tr>
<tr>
<td><strong>Section 3: HIV knowledge and sexual behaviour UNAIDS4:</strong> Aggregated indicators (%) of HIV knowledge and sexual behaviour over five population groups (with 95% confidence limits)</td>
<td></td>
<td>53.68</td>
<td>53.47</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(49.2-58.2)</td>
<td>(49.0-58.0)</td>
</tr>
<tr>
<td>2.1 Percentage of individuals who know how HIV transmission occur from an infected mother to her child</td>
<td></td>
<td>85.04</td>
<td>70.35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(81.6-88.4)</td>
<td>(65.9-74.8)</td>
</tr>
<tr>
<td>2.2 Percentage of individuals who know two key actions that reduce HIV transmission from an infected mother to her child</td>
<td></td>
<td>83.16</td>
<td>50.53</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(75.6-90.8)</td>
<td>(40.4-60.7)</td>
</tr>
<tr>
<td><strong>Section 3: HIV knowledge and sexual behaviour UNAIDS4:</strong> Aggregated indicators (%) of HIV knowledge and sexual behaviour over five population groups (with 95% confidence limits)</td>
<td></td>
<td>27.37</td>
<td>24.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(23.4-31.4)</td>
<td>(20.2-27.8)</td>
</tr>
</tbody>
</table>
### 3.2 Percentage of individuals who know at least two ways of preventing sexual transmission of HIV

<table>
<thead>
<tr>
<th>Performance Indicators;</th>
<th>Kasese</th>
<th>Kiruhura</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNAIDS5: Aggregated indicators (%) of HIV knowledge and sexual behaviour over three population groups (with 95% confidence limits)</td>
<td>n=394</td>
<td>n=361</td>
</tr>
</tbody>
</table>

### 3.3 Percentage of individuals who have ever used a condom when having sexual intercourse

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Kasese</th>
<th>Kiruhura</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=380</td>
<td>37.5</td>
<td>62.5</td>
</tr>
</tbody>
</table>

### 3.4 Percentage of individuals who had sex with more than one sexual partner in the last 12 months

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Kasese</th>
<th>Kiruhura</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=394</td>
<td>15.1</td>
<td>9.7</td>
</tr>
</tbody>
</table>

### 3.5 Percentage of individuals who sex with a non marital or non cohabiting sexual partner in the last 12 months

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Kasese</th>
<th>Kiruhura</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=380</td>
<td>16.2</td>
<td>16.4</td>
</tr>
</tbody>
</table>

### 3.9 Percentage of individuals who perceive low or no risk of getting HIV/AIDS infection

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Kasese</th>
<th>Kiruhura</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=380</td>
<td>37.5</td>
<td>62.5</td>
</tr>
</tbody>
</table>

### 3.10 Percentage of never married youth who have ever had sexual intercourse

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Kasese</th>
<th>Kiruhura</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=173</td>
<td>57.23</td>
<td>48.85</td>
</tr>
</tbody>
</table>

### Indicators (%) of HIV knowledge and sexual behaviour among the youth (with 95% confidence limits)

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Kasese</th>
<th>Kiruhura</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=191</td>
<td>6.81</td>
<td>4.76</td>
</tr>
</tbody>
</table>

### 3.11 Percentage of youth who have had sexual intercourse before the age of 15

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Kasese</th>
<th>Kiruhura</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=95</td>
<td>94.74</td>
<td>73.79</td>
</tr>
</tbody>
</table>

### 3.12 Percentage of youth who know at least three correct steps on how to use a condom

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Kasese</th>
<th>Kiruhura</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=189</td>
<td>38.22</td>
<td>22.22</td>
</tr>
</tbody>
</table>

### Sexually Transmitted Infection: Aggregated indicators (%) of STI over five population groups (with 95% confidence limits)

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Kasese</th>
<th>Kiruhura</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=380</td>
<td>49.26</td>
<td>43.37</td>
</tr>
</tbody>
</table>

### 4.1a Percentage of individuals who correctly identify at least two common signs or symptoms of STIs in Women

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Kasese</th>
<th>Kiruhura</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=380</td>
<td>48.63</td>
<td>44.21</td>
</tr>
</tbody>
</table>

### 4.1b Percentage of individuals who correctly identify at least two common signs/symptoms of STIs in Men

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Kasese</th>
<th>Kiruhura</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=284</td>
<td>40.49</td>
<td>50.35</td>
</tr>
</tbody>
</table>

### 4.2 Percentage of individuals who know three or more actions to take when s/he is infected has a sexually transmitted infection

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Kasese</th>
<th>Kiruhura</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=284</td>
<td>84.27</td>
<td>71.21</td>
</tr>
</tbody>
</table>

### 4.3 Percentage of individuals who know a health facility where they can receive STI treatment

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Kasese</th>
<th>Kiruhura</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=464</td>
<td>80.95</td>
<td>67.12</td>
</tr>
</tbody>
</table>

### Tuberculosis; UNAIDS6: Aggregated indicators (%) of TB over Three population groups (with 95% confidence limits):

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Kasese</th>
<th>Kiruhura</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=280</td>
<td>54.3</td>
<td>62.4</td>
</tr>
</tbody>
</table>

### 5.1 Percentage of individuals who that TB is curable disease

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Kasese</th>
<th>Kiruhura</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=380</td>
<td>59.47</td>
<td>63.16</td>
</tr>
</tbody>
</table>

### 5.2 Percentage of individuals who know at least two signs and symptoms of TB

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Kasese</th>
<th>Kiruhura</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=380</td>
<td>58.42</td>
<td>67.11</td>
</tr>
</tbody>
</table>

### 5.3 Percentage of individuals who know how TB is transmitted

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Kasese</th>
<th>Kiruhura</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=380</td>
<td>53.44</td>
<td>62.4</td>
</tr>
</tbody>
</table>
### 5.4 Percentage of individuals who know the risk of not completing TB treatment

<table>
<thead>
<tr>
<th></th>
<th>Kasese (n=380)</th>
<th>Kiruhura (n=380)</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=380</td>
<td>63.95 (59.1-68.7)</td>
<td>46.84 (41.8-51.8)</td>
</tr>
</tbody>
</table>

### 5.5 Percentage of individuals who know the nearest place to receive TB treatment

<table>
<thead>
<tr>
<th></th>
<th>Kasese (n=380)</th>
<th>Kiruhura (n=380)</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=380</td>
<td>76.58 (72.3-80.8)</td>
<td>73.42 (68.9-77.8)</td>
</tr>
</tbody>
</table>

### Malaria; Indicators of malaria (%) among women with children less than 1 year old (with 95% confidence limits)

<table>
<thead>
<tr>
<th></th>
<th>Kasese (n=95)</th>
<th>Kiruhura (n=95)</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.1 Percentage of children under 1 years who had fever in the two weeks preceding the survey and received treatment with ACTs within 24 hours of onset of fever</td>
<td>11.58 (5.1-18.1)</td>
<td>22.11 (13.7-30.5)</td>
</tr>
<tr>
<td>6.2 Percentage of women who have received two or more doses of IPT2 during their last pregnancy in the last two years</td>
<td>35.79 (26.1-45.5)</td>
<td>31.58 (22.1-41.0)</td>
</tr>
<tr>
<td>6.3 Percentage of children under 1 years who slept under a ITN the previous night</td>
<td>42.11 (32.1-52.1)</td>
<td>68.42 (58.9-77.8)</td>
</tr>
<tr>
<td>6.4 Percentage of mothers of children 0-11 months who always slept under an ITN during last pregnancy</td>
<td>34.74 (25.1-44.4)</td>
<td>47.37 (37.2-57.5)</td>
</tr>
<tr>
<td>6.5 Percentage of mothers of children 0-11 months who know two or more ways to prevent malaria</td>
<td>47.9 (37.9-57.9)</td>
<td>35.8 (26.1-45.5)</td>
</tr>
<tr>
<td>6.6 Percentage of mothers of children under five years who know two or more signs and symptoms of malaria</td>
<td>62.5 (55.6-69.4)</td>
<td>62.1 (55.2-69.0)</td>
</tr>
<tr>
<td>6.7 Percentage of mothers of children under five years who know how malaria is transmitted</td>
<td>89.6 (83.4-95.7)</td>
<td>87.8 (80.6-94.1)</td>
</tr>
<tr>
<td>6.8 Percentage of Households with at least one ITN</td>
<td>67.37 (57.9-76.9)</td>
<td>77.89 (69.5-86.3)</td>
</tr>
</tbody>
</table>

### Section 7: Reproductive Health; UNAIDS7: Indicators of reproductive health (%) among women with children less than 1 year old (with 95% confidence limits)

<table>
<thead>
<tr>
<th></th>
<th>Kasese (n=95)</th>
<th>Kiruhura (n=95)</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.3 Percentage of mothers of children 0-11 months who attended ANC at least 4 times during last pregnancy</td>
<td>55.79 (45.7-65.8)</td>
<td>67.37 (57.9-76.9)</td>
</tr>
<tr>
<td>7.4 Percentage of mothers of children 0-11 months who delivered their last baby in a health facility</td>
<td>61.05 (51.1-70.9)</td>
<td>61.05 (51.1-70.9)</td>
</tr>
<tr>
<td>7.5 Percentage of mothers of children 0-11 months who were assisted by a trained health worker during delivery</td>
<td>90.53 (84.5-96.4)</td>
<td>71.58 (62.4-80.7)</td>
</tr>
<tr>
<td>8.4 Percentage of Children under 5 with fever, seeking care</td>
<td>30.53 (21.2-39.9)</td>
<td>36.84 (27.1-46.6)</td>
</tr>
</tbody>
</table>
LOT QUALITY ASSURANCE SAMPLING (LQAS) IMPLEMENTATION IN KIRUHURA AND KASESE DISTRICTS

1-M&E district consultative
2-LQAS-ToT
3-Training session
4-Debriefing at field pretest
5-Group photo-1st week
6-Data collection
7-Hand tabulation session
7-Presentation
Certificate award

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jothamub@yahoo.com
MSPH/CDC Fellow