HIV/AIDS M&E - Getting Results

These reports describe activities, challenges and lessons learned during the Global AIDS Monitoring and Evaluation Team’s (GAMET) work with countries and other partners.

Results-Oriented Monitoring: A Successful Transition in Madagascar

National HIV/AIDS Council in Madagascar (SE/CNLS), Global AIDS Monitoring and Evaluation Team (GAMET) and AIDS Strategy and Action Plan (ASAP)

Madagascar launched three initiatives to collect strategic data needed to refine and improve the efficiency of its response against HIV and other sexually transmitted diseases, drawing on lessons learned. The three tools are:

- An HIV/AIDS epidemiological profile
- Vulnerability mapping
- Strengthening the monitoring and evaluation system to obtain the information needed for planning.

Dealing with an unusual epidemiological situation and inadequate data for planning

Madagascar is one of the few sub-Saharan African countries with an HIV prevalence rate below 1% among the general population. The epidemiological situation in Madagascar is unusual. Although HIV prevalence is low, other sexually transmitted diseases (STDs), such as syphilis, have a high prevalence rate. This represents a threat for the country, particularly as many STD risk and vulnerability factors – most especially persistent high risk sexual behaviors – can also spread HIV.

National epidemiological data exist, but are incomplete and not conducive to planning at regional, district and communes levels. To remedy this, specific surveys could be done at the different levels, but Madagascar’s low HIV prevalence rate makes surveys very expensive. The alternative is to use tools to assess the vulnerability of communities through simplified data collection, which provides useful, relevant information. This note describes three initiatives to develop tools to build capacity to better understand Madagascar’s epidemiological context. The methods and results are discussed of: compiling HIV epidemiological profiles; mapping vulnerability; and strengthening the monitoring and evaluation system.

Solid planning underlines program success. Aware of this, Madagascar began analysis and planning to respond to HIV. HIV and AIDS are among the national development priorities, and political commitment to the response at the highest level of the Government is led by the President of the Republic. Madagascar has adopted two national HIV strategic plans. The first plan, 2001-2006, relied on a multisectoral approach to respond to the country’s specific needs, to plan interventions according to local priorities, and to reinforce community ownership of the response.

Figure 1: Madagascar and its regions

Source: World Bank, 2008. (See final page for information on Madagascar “in brief”)

Based on the experience of implementing the first plan, and taking into account its weaknesses and the lessons learned, Madagascar intensified efforts to ensure the
best use of the available resources. In particular, the importance was recognized of the following:

- Results-oriented management (see Figure 1)
- Using data to inform the response
- Giving priority to the most vulnerable areas and targeting high-risk groups
- Reinforcing community participation for better ownership of the response.

Figure 1: The results cycle applied to HIV strategic planning

Introducing the Results Cycle


The second national strategic plan, “Madagascar Action Plan for an effective response to HIV/AIDS 2007-2012” was prepared following these principles.\(^1\) Given the importance of planning and monitoring activities for an effective response to HIV/AIDS, the year 2007 was declared “The HIV and AIDS response monitoring and evaluation year”.

The three initiatives undertaken in 2007 to develop tools to build capacity to better understand Madagascar’s epidemiological context, correspond to various phases of the results cycle:

- The HIV/AIDS epidemiological profile (phase 1)
- The vulnerability mapping (phases 3 and 4)
- Strengthening the monitoring and evaluation system to obtain the information needed for planning (phases 5 and 6).

These three initiatives are part of a pragmatic approach that encourages the use of new research methods to strengthen program planning and management, thus ensuring an effective response at national and peripheral levels. This note describes the initiatives and the lessons learned during the preparation and use of the tools.

The epidemiological profile

Taking into account the realities of the epidemic in the Strategic Plan is crucial for the success of a national response. And yet, many countries rely on generic approaches which do not necessarily respond to their specific epidemic. It is crucial to understand the country’s epidemic, and particularly the factors driving

\(^1\) During the review of the plan, ASAP ranked the plan among the best it had reviewed. ASAP – the AIDS Strategy and Action Plan service of UNAIDS – provides technical assistance to countries who request it, in preparing AIDS strategies and action plans with clearly defined priorities, based on evidence, and that are results-oriented and with detailed cost estimates. ASAP began operations in January 2006, and is hosted by the World Bank Global HIV/AIDS Program on behalf of UNAIDS. (www.worldbank.org/ASAP)
HIV transmission — in short, to know where and how the last 1000 infections occurred.

Many studies on HIV prevalence, sexually transmitted diseases, high-risk behaviors, and the drivers of the HIV epidemic have been carried out in Madagascar since 1985. However, these studies had not been carefully looked at together, to review essential elements of the different studies, and link, cross-check, and reconcile the various data to get a comprehensive and consistent analysis of trends in the epidemic and to define the main factors driving HIV transmission.

To rectify this, the Executive Secretarial of the National Council HIV/AIDS of Madagascar (SE/CNLS) decided to compile all existing data, and develop a coherent epidemiological profile that would enable the policy, financial and political implications to be drawn out. The study was carried out with support from ASAP and the World Bank's Global HIV/AIDS Monitoring and Evaluation Team (GAMET), with technical support from UNAIDS, USAID, and WHO international experts.

Methodology

The epidemiological context analysis aims to rigorously assess the HIV epidemic in Madagascar, understand its evolution, define the main transmission factors, identify the most affected geographical areas, analyze the reach of existing programs, and define some thematic priorities.

The methodology used to analyze the characteristics of the HIV/AIDS epidemic in Madagascar proceeded through the following steps:

- A planning workshop
- A literature search
- Analysis
- Modeling
- A validation workshop
- Determining the scope of new surveys to be done

The planning workshop gathered national and international key actors to decide, through a participatory approach, upon the procedure to follow in defining the epidemiological profile of HIV/AIDS in Madagascar. The workshop helped to define the roles and responsibilities of the various actors, and to prepare in a spirit of consensus, the document plan, the various chapter outlines, and the road map.

The literature review found that studies of HIV in Madagascar followed different methodological approaches: random sampling or not, different sites and survey years, samples of varying sizes, used different HIV tests, and had varying quality control. Key information — STD/HIV prevalence, knowledge on HIV, age of sexual initiation, multiple partners, condom use, STD treatment, and HIV epidemic determinants — was summarized.

The analysis was done in two phases:

- An initial sub-analysis examined the data and assessed methodological strengths and weaknesses and data comparability in order to make a rigorous summary of study results.
- Data triangulation cross-referenced the main data gathered in the literature search, and main conclusions were drawn out.

The modeling identified the main sub-populations at risk as well as their size and the prevalence level in each group, in order to estimate the overall national prevalence. (If data are available for regions or separately for urban/rural areas, modeling can be done for each geographical area, and a national prevalence rate computed. If data are available for different years, the epidemic modeling can also estimate a prevalence trend line and the epidemic’s future potential.)

A validation workshop was held with national and international experts and stakeholders, to present the preliminary results of the study and discuss the analysis, suggest ways to fill gaps, draw out policy implications, and prepare a survey schedule. It was decided to set up two review committees, a national and international one, each tasked with rigorous peer review of the document.

Results

The national HIV prevalence rate was 0.13% in 2007. The study found low HIV prevalence rates overall, although rates vary from 0.29% to 1.47% among most-
affected groups, and there are indications of increasing prevalence in some groups. HIV prevalence is highest in big coastal towns that attract a lot of tourists. These coastal areas where HIV is concentrated appear to have many risk factors for HIV transmission among the general population.

Prevalence of syphilis is high compared to other countries in Africa. In 2005-2006, syphilis prevalence was 5.6% in Madagascar against 0.95% in Botswana. On the other hand, syphilis has fallen sharply; among pregnant women, it fell from 12% in 1995 to 5% in 2005.

A thorough review of about 200 publications enabled the epidemiological profile of HIV in Madagascar to be refined. It also helped identify data and surveillance gaps that need to be filled. A survey and research agenda was developed, that gives priority to studies of specific sub-populations identified in the National Strategic Plan (NSP), to collect baseline data that will be used to monitor progress under the NSP.

Studies on biological and behavioral aspects and on HIV determinants among other groups will later on increasingly strengthen the HIV and AIDS epidemiological profile in Madagascar.

Figure 3: Prevention being discussed in a village

The vulnerability mapping

In Madagascar and other countries with low HIV prevalence, a targeted response geared to the most-at-risk populations in areas where they are concentrated is the cost-effective way to prevent HIV spreading. Decentralized response management coupled with concentrated efforts in high risk areas will also enable strong ownership of the response by the beneficiaries. The more the response is felt to respond to their needs, the more likely people are to participate. Decentralization to the level that is best for planning and implementing the response – the district and commune level – enables better coordination, and synergy among activities.

The local response is defined in Madagascar as “response by the people where they live and work”. At the commune level, Local Committees for the Control of AIDS (CLLS) have been created. The CLLS prepare Local Plans for the Control of HIV and AIDS (PLLS), based on the National Strategic Plan. The PLLS respond to local realities of risk and vulnerability to HIV, and are translated into subprojects called Small Feasible Actions (in French, « Petites Actions Faisables » or PAF). Different stakeholders from the public sector, sectoral ministries, civil society, NGOs, associations, and other grassroots community organizations and the private sector set up the PAFs.

Civil society interventions aim mainly at reducing HIV risk (Abstain, Be faithful, and use Condoms) and social mobilization for use of clinical services. Funding is through the Prevention Support Fund under the Multi-sectoral Project for AIDS Prevention (PMPS) supported by the World Bank. For transparency, efficiency, and equity, funding provided for PAFs must follow the principle of establishing clear priorities to achieve the expected results.

Since 2004, the SE/PNLS has identified 20 areas considered highly at risk for the spread of HIV and focused interventions in these areas at risk. However, the inadequacy of data makes it difficult to identify the groups most at risk as well as their precise location. The risk mapping was therefore revised in 2006 to support more effective prevention. The final output is a risk mapping in which communes identified to be at risk are communes where “bridge groups” are located, which puts the general population at increased risk for HIV transmission.

Methodology

The primary aim of the study is to classify communes according to their degree of vulnerability and use this to identify communes to prioritize in strengthening the HIV response. This tool enables stronger program planning and management at national and peripheral levels.

The study methodology proceeded in several phases:

- Literature research
- Design of tools for data collection at the commune level
- Data collection
- Data analysis
- Use of the data to prioritize the communes for enhanced prevention efforts.
The literature review aimed to identify the factors that negatively impact individual capacity to take care of their health. These factors include availability and access to HIV prevention, care and treatments services. The literature review also helped identify most at risk populations (MARPs), and bridge groups (groups with close interactions between MARPs and the general population).

Data were collected at central level for 576 communes and at commune level for 655 communes (thus the survey covered 1231 communes -- 80% of the 1557 communes in Madagascar). At the central level, only the presence or absence of sites identified as having concentrations of high risk groups was listed. At the commune level, detailed information was collected on the commune profile and on vulnerability factors, using the tools developed for this purpose. This local data collection covered communes that could be easily accessed with the resources available.

In the analysis phase, scores were assigned to the vulnerability factors in each commune. For data collected at the central level, every factor was assigned a score of 0 or 1, depending on the presence or absence of that factor in the commune. For the detailed data collected at the commune level, each factor was assigned a score on a scale of 0 to 3 -- 0 if the factor was not evident in the commune, 1 if the vulnerability factor had a low rate, 2 for a high rate, and 3 if the vulnerability factor was very high. Demographic weight was also taken into account in the final analysis for prioritizing communes.

The sum of the scores obtained for all the factors was used to indicate communes’ vulnerability levels. High scores identified communes considered most vulnerable to STDs, HIV, and AIDS. In other words, what makes a commune vulnerable is not necessarily the presence of many factors but the combined “weight” or intensity of factors. Thus, communes with a score of 3 on four factors would be regarded as more vulnerable than communes with a score of 1 on, say, eight factors. Using these scores, communes were classified into three groups according to their degree of vulnerability:

- Highly vulnerable communes (scores higher than 16)
- Moderately vulnerable communes (scores ranging from 10 to 15 points and
- Weakly vulnerable communes (0 to 9 points).

The implementation of the study attracted the participation of many stakeholders at different levels. A national consultant prepared the literature review and the data collection at the central level. The unit responsible for supporting the SE/CNLS local response and the unit in charge of monitoring and evaluation at the central level prepared the basic structure for the data collection and for monitoring the launch of data collection at the local level. Data were collected at the commune level by local consultants under the supervision of the technical coordinators (TC) of that region in cooperation with local authorities. The technical coordinators in cooperation with the Head of the Region and the Regional Director of Health analyzed the data according to a standard method. Cross-checking was done at the central level before the results were released.

Results

The data analysis identified 119 highly vulnerable communes and 338 moderately vulnerable communes, respectively representing 10% and 28% of all communes surveyed.

The 119 communes located in 22 regions that were identified as being highly vulnerable constitute pilots areas for intensified field activities. They have common risk factors:

- Sex work -- existence of “pick-up joints”, brothels, and other places and locations frequented by sex workers and clients
- Specific socio-economic activities related to the geographical environment like tourist sites, mining activities, and zebus cattle markets
- Social habits conducive to risky behaviors such as some customary feasts
- Non-availability or difficult access to HIV prevention, care or treatment services.

The main output is a set of descriptive cards that provide an overview of each of the 119 communes. The cards summarize information on the demography, economic, cultural, health, and social situation (population, activities, transportation and communication, health and social infrastructure) and vulnerability factors identified for each commune.
Limitations of the study
The study was unable to estimate the size of the groups affected by the risk factors. This makes it difficult to measure the importance of the risk factors in each region of the country and population. On the other hand, the study aims did not include research into risk factors in the population. Consequently, the questionnaires on behavioral factors are not dealt with by the study.

During the collection of the data, progress was noticed in HIV programs. As with all dynamic situations, over time, discrepancies can develop between the study data and current conditions.

Methodology
The aim is to have an effective and efficient monitoring and evaluation system that is used for managing and improving the STD, HIV and AIDS response in Madagascar.

A participatory approach is the foundation of the Monitoring and Evaluation plan. The small group working on monitoring and evaluation comprised someone from GAMET3 (World Bank) and various stakeholders at all levels and sectors, consulting with national and international experts. The plan was designed to meet the requirements of a multisectoral, community-based, and decentralized response.

The design of the monitoring and evaluation system followed the following steps:
- Identify and select indicators
- Identify partners and structures
- Identify the flows of information needed
- Identify the data sources
- Define the information system
- Develop a data dissemination strategy
- Prepare the monitoring and evaluation implementation plan.

In identifying and selecting indicators, variables were defined that could measure the changes that occur during the activity and/or the results to be achieved by the planned activities. Every indicator maps to a clear and practical objective, enabling baseline comparisons with the results achieved.

As well as identifying the partners and structures involved in implementing the monitoring and evaluation system, everybody’s roles and duties were defined. The

3 Created in 2002, the Global AIDS Monitoring and Evaluation Team (GAMET) is part of the World Bank Global HIV/AIDS Program. GAMET works closely with UNAIDS and other partners to support national capacity building and development of HIV monitoring and evaluation systems in countries, and most importantly, supports use of the data collected.
main tasks that must be fulfilled are clearly described as well as who is responsible, so that the planned objectives can be met.

The definition of the flow of information schematically presents the data and information flow among the various categories of actors at different levels. The plan covers collection and sharing of data as well as information feedback to each level.

The information system designs steps and tools that enable easy data collection, transmission, and use across the decentralized and central levels. The information system is composed of data collection tools, data storage and analysis software, as well as a plan for building the capacities needed to operate the system.

The data dissemination strategy defines the various channels available for disseminating information to the different target groups, decision-makers, partners and wider population, so that the data can be the foundation of decision-making.

The Monitoring and Evaluation system implementation plan documents activities in detail, and estimates the budget needed for implementation. All the system components were validated at the national level during working sessions that brought together representatives of the Executive Secretariat/ National HIV/AIDS Council, national and international partners, civil society, and representatives of People Living with HIV.

Results

The National Monitoring and Evaluation Plan 2007-2012 for Madagascar is available. It comprises the main components described above. There are also data collection tools for use at all levels. Wide dissemination has been undertaken in each region to build local ownership.

The Monitoring and Evaluation system is decentralized and enables data to be used not only at the level at which they are collected, but also in order to manage and/or to take decisions. Capacity building for various partners was an important part of implementing the system.

Data collection is done at the grassroots level and the flow of data is clearly defined, whereas, previously, officers at the regional level were responsible for compiling information and transmitting it to the central level. Under the new system, every level is informed about the M&E plan, the flow of data, and standardized tools are used at every level. This all makes the data more and more comprehensive and precise. Nevertheless, efforts are still needed to build capacity to use the data collection tools and to improve the reporting rate.

Madagascar selected two types of indicators:

- 30 key indicators considered the most important and reflecting progress achieved in implementing the National Strategic Plan. These are used in communication to the general population.
- 39 complementary indicators which enable more specific analysis of the results. These are mainly used by service providers for detailed program monitoring.

The new system is results-oriented. It has more results indicators that were agreed by consensus among stakeholders, than the previous indicator set. The actors have a better understanding of the objectives and value of data and of monitoring and evaluation.

The data and tools described in this article -- the commune vulnerability mapping, the epidemiological profile, and the monitoring and evaluation system -- are not an end in themselves. They provide the elements needed to be able to prioritize geographic areas and target groups for HIV interventions. This is the basis for strategy development.

Limited financial resources and time prevented data collection in all communes. However, the research enabled a good number of vulnerable communes to be identified. Missing information was recorded, and used to establish a roadmap for activities and list of surveys to
be undertaken in future. This information will be useful for updating the risk mapping and for refining the country epidemiological profile.

Epidemiological profiles need regular updating. One of the ways to measure vulnerability is to look at variations over time and across different areas. A certain amount of information is still lacking to establish a comprehensive epidemiological profile for Madagascar. Consistent monitoring work is needed.

Some progress has been achieved, and Madagascar continues to make efforts to improve data collection.

**Difficult methodological decisions on HIV surveillance**

In a low HIV prevalence country such as Madagascar, there are important methodological decisions to make in monitoring the epidemic in a way that is most conducive to good strategic decision-making:

- Should we continue to rely on the HIV prevalence rate among pregnant women?
- Should we monitor high risk groups such as sex workers and men who have sex with men?

Every method has its advantages and disadvantages. Presently, the only data available are national level data that are not very useful for planning at the grassroots levels (region, district, and commune) where things really happen. Carrying out more specific surveys at regional, district or commune level would require significant financial resources which the country does not have. In addition, even if the financial resources were available, rational decisions on their allocation would have to ensure that resources are used where they can really help save lives in order to ensure that we "make the money work" well.

**Sharing experiences and creating strong technical teams for the analytical phase are crucial for achieving results.**

The national and international experts’ who provided technical support and drew on similar experiences gained in other countries made all the difference to achieving the expected results. Every actor contributed specifically according to their particular expertise and experience. It is important to set up, at the national level, a strong technical team to be responsible for the analytical work.

**The involvement of all decentralized structures is key in the HIV response.**

The participatory approach used in the various actions undertaken has been successful. This approach enables different actors to “own” the response and better understand the national strategy preparation process as well as their own responsibilities within the strategy.

Indeed, all coordination structures at all levels must play their appropriate roles. The role of the national coordination body is to stimulate, facilitate, and supervise. The decentralized structures ensure the contributions needed to achieve objectives that need a broad ownership among local authorities and local officers. The commitment of the local population is shown by their determination and motivation to face the challenges that HIV presents.

**Conclusion**

One cannot expect everything to be perfect, or all the tested scientific methods to be available for an effective response to STDs, HIV, and AIDS. But HIV does not wait and we must respond rapidly. We must select a pragmatic approach and be ready to learn through careful actions based on available evidence. It is crucial to understand how HIV is spreading and to prepare relevant response strategies. For this, we must put in place the research tools needed for reporting the results achieved and to capture and learn from best practices.

Given the unusual epidemiology in Madagascar and the inadequacy of relevant data, the vulnerability mapping tool, the epidemiological profile and the products of the monitoring and evaluation system are important information tools to be used strategically.

Based on these data, particular attention is being given to the communes classified as highly and moderately vulnerable, and the groups identified to be at most risk. Prevention activities are being strengthening in those communes and among the targeted groups without neglecting prevention activities in the other communes and general population. The new data enabled priorities to be set and resources to be allocated according to the criterion of vulnerability of communes and sub-populations.

In conclusion, these analytical tasks sparked renewed prevention activities and mobilized various stakeholders at the grassroots level. From now on, program activities will be guided by the results of evaluations of how well various interventions are performing.
Madagascar in brief

**Location:** Madagascar is located in the South-West of the Indian Ocean and is separated from the African continent by the Mozambique Channel.

**Surface:** The surface of the “Great Island” is 587,401 square kilometers. It is 1,500 kilometers long and 500 wide in its widest point and has 5,000 kilometers of coastline, washed on the west by the Mozambique Channel, and on the east by the Indian Ocean. There are a number of small islands, the most important of which are Nosy Be and Saint Mary.

**Population:** On June 30, 2006, the estimated population of Madagascar was 17.8 million inhabitants. About 70% of the population lives in rural areas, 5% in the capital city and 25% in other urban areas. The population is mainly composed of African and Indonesian population groups with sub-groups of Indian and Chinese origin. The country is unified in its diversity by a single language, Malagasy, which has few dialectal variations.

**Administrative Structure:** Until 2003, the Island was divided into six autonomous administrative provinces. It now has twenty-two administrative regions. The regions are in turn subdivided into 116 districts and 1549 communes which are themselves divided into quarters (Fokontany) forming the basic administrative unit.

**Life expectancy:** Continuous declines in infant and child mortality have contributed to improvements in the Malagasy population life expectancy. From 52.1 years in 1993, life expectancy at birth reached 55.5 years in 2005.

**Total fertility rate:** Despite declines, Malagasy women’s fertility remains high, at an average of 5.2 children per woman. However, there is an important difference between urban and rural areas: the total fertility rate is 3.7 children per woman in urban areas and 5.7 in rural areas.

**Literacy** Recognizing that education and literacy are the foundation of sustainable human development, the country has made considerable efforts in this field. The literacy rate among the adults rose from 58% in 1990 to 63% in 2005. The gap between the urban and rural areas is great but the gender disparity is relatively low.

**GDP/inhabitant:** With GDP at (PPP $) 923 in 2005, Madagascar is confronted by a major challenge of poverty reduction. In 2003, 74% of the population lived below the absolute poverty line, with the great majority living in rural areas. A national poverty reduction strategy (PRSP) was developed in 2003. The “Action Plan for Madagascar 2007-2012” reinforces the PSRP and integrates HIV/AIDS. The Action Plan also embodies the strong determination of the country to address poverty.

**Human Development Index:** With the HDI at 0.533 in 2007, Madagascar ranks 143 out of 177 countries. However, it should be noted that the index has been improving (it was only 0.400 in 1975).

*Figure 7: A small port in Madagascar*
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