Republic of Rwanda

National Strategic Plan for HIV and AIDS 2009-2012

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Special thanks to our partner institutions who contributed to the production of this document

PREFACE

Since the beginning of the 2005–2009 National Multi-sector Strategic Plan (NMSP), Rwanda's national HIV response has made significant progress towards the goal of universal access to HIV/AIDS services. Continuing this progress, Rwanda decided to develop this new National Strategic Plan for HIV/AIDS (NSP) before the end of the previous NMSP period. The NSP is the result of more than a year of preparatory work, starting with the development of Rwanda's Economic Development and Poverty Reduction Strategy (EDPRS) 2008-2012, which sets out the overarching goals for the response to HIV/AIDS as well as reaffirming Rwanda's commitment to a multi-sector response.

In addition, a wide range of analyses carried out in 2007 and 2008 have helped to ensure that the NSP is based on the most up to date understanding of the epidemic, that the strategies are based on evidence of what works in Rwanda and elsewhere, and that the strengths and weaknesses of the systems and mechanisms for responding to HIV/AIDS are addressed through the NSP.

The development of the NSP itself, which was carried out between January and March 2009, has been based on broad participation of all of the actors involved in fighting HIV/AIDS in Rwanda—communities, civil society organizations, ministries and development partners. As a result, we are confident that the strategies identified in the plan are those that are the most likely to achieve the ambitious results we are aiming for.
This new NSP presents all stakeholders of Rwanda's HIV/AIDS response with major challenges. We must all review our working methods with the aim of becoming more effective and more coherent in our common efforts. This document provides strong orientations and evidence-based strategies for achieving the ambitious results we have put forth.

It is now our responsibility to rise to the challenge and combine the necessary individual and collective resources in our drive towards universal access to HIV services. Let us get to work, or rather continue our work with renewed energy and determination.

—Dr Richard Sezibera, *Rwanda Minister of Health*

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ACKNOWLEDGEMENTS

The National AIDS Control Commission (CNLS) would like to take this occasion to express its deep appreciation and sincere thanks to all who participated in the development of the NSP 2009–2012. This includes all international and national institutions near and far who contributed technical support in this participatory approach, including advice, consultation and participation in numerous meetings and workshops. These include TRAC Plus, CAMERWA, National Reference Laboratory, and National Blood Transfusion Centre, as well as representatives from EDPRS sectors and from the decentralized level. All individuals who tirelessly work for the fight against HIV/AIDS in Rwanda, particularly the civil society and private sector partners who played an important role in this process. UN agencies, the U.S. Agency for International Development (USAID), MEASURE Evaluation and the Clinton Health Access Initiative deserve special mention for the financial and technical resources needed to develop this plan. We also thank all other partners for their tireless contributions to all the steps of this process.

—Dr Anita Asiimwe, *Executive Secretary of the CNLS*

EXECUTIVE SUMMARY

This National Strategic Plan on HIV/AIDS (NSP) describes how the unique challenges that HIV/AIDS poses to Rwanda's economic and social development will be addressed between 2009 and 2012. With an estimated 3% of the adult population infected with HIV (1), Rwanda is much less affected than other countries in the region. Nonetheless, HIV transmission is far from being under control. And although nearly 80% of those in need are already receiving anti-retroviral therapy (ART) (2), the social, economic and health burden of HIV/AIDS on those affected is a heavy one. This NSP sets ambitious targets aimed at making Universal Access to HIV Prevention, treatment, care and support a reality. It is closely aligned with Rwanda's Economic Development and Poverty Reduction Strategy 2008–2012 (EDPRS) (3), and the Health Sector Strategic Plan (HSSP II) (4).

The preparation for the development of this NSP has lasted well over a year, and has included in-depth research and analysis of the epidemiology of HIV in Rwanda, the achievements of the response to date and the challenges faced today, the capacities of the wide range of actors and implementation systems involved in the response, and the most promising evidence of effective interventions from Rwanda and beyond. These analyses fed into the process of NSP development, carried out during the first quarter of 2009 with the involvement of stakeholders from all sectors and from all over Rwanda.

A number of overarching principles will underpin the implementation of the NSP: promoting equity and human rights, in particular as they relate to marginalized groups, the rights of women and girls, and people living with HIV/AIDS; designing and implementing the response to HIV/AIDS on the basis of sound evidence of the needs and the most effective strategies; and responding to HIV/AIDS in a comprehensive way, and of closely linking this response to broader health and social development programs.The overarching results that this plan will achieve by 2012 are as follows:

1. The incidence of HIV in the general population is halved by 2012
2. Morbidity and mortality among people living with HIV are reduced
3. People infected and affected by HIV have the same opportunities as the general population

The main objective set by EDPRS (3) for the national HIV/AIDS response until 2012 is to halve the incidence of new HIV infections. In order to achieve this challenging result, efforts to prevent sexual transmission of HIV will have to be strengthened and most significantly will undergo two major shifts. Firstly, while continuing to ensure that programs, services and support for HIV prevention reach the general population, the priority will be to ensure that most at risk populations are reached by programs that respond to their specific situations. Secondly, major changes will be made in the way prevention programs are designed and implemented.

The NSP emphasizes comprehensive approaches to HIV prevention, recognizing that only approaches (only condoms, only abstinence, only testing, only information...) are not effective. At the same time the NSP also emphasizes the importance of continuity of prevention efforts. Behavior change is not a once-off process, and just like the provision of treatment to people living with HIV, HIV prevention efforts in communities need to be maintained over time, and they need to be adapted and updated. Because the NSP is also committed to the active involvement of communities in responding to HIV/AIDS, it also pays attention to the need to strengthen communities so that their contribution can be both effective and ongoing.

In addition to these innovative strategies to prevent new infections, Rwanda will continue its efforts to give access to care and treatment for HIV/AIDS to all people in need of treatment. The NSP will further reduce mortality and morbidity due to HIV/AIDS. Already nearly 80% of those targeted under our Universal Access commitments are on antiretroviral treatment (2). The NSP aims to significantly increase the absolute numbers of people on treatment by raising the threshold for initiation of ART. At the same time an expansion of care and support (including for those not yet on ART), both within facilities and in communities, will ensure that we make a major contribution to improving the quality of life of all those infected with HIV. To achieve these results, further efforts will be expended on strengthening the health system and strengthening community-based support systems, and on building on Rwanda's success to date in using the response to HIV/AIDS to drive more fundamental developments in health systems.

Apart from ensuring access to HIV care and treatment services for an increasing number of infected people, Rwanda also maintains a major preoccupation to improve the quality of life of those infected and affected by the disease through the elimination of social and economic discrimination they may encounter because of HIV. The NSP also represents significant shifts in the vision and approach for mitigating the impact of HIV. Careful thought has been given to the development of strategies to help ensure that HIV/AIDS are not a barrier to opportunities, including economic development and social protection.

In recent years Rwanda has learned a great deal about how best to target support to vulnerable people, and in particular how to ensure that support for economic development initiatives is based on sound, viable business plans rather than being limited to providing credit. To date, the impact of AIDS impact mitigation programs has been hard to measure, and we are therefore particularly pleased to have been able to introduce indicators from the Rwanda Stigma Index Survey (5), a survey carried out by and with people living with HIV that gauges social, economic and legal aspects of the impact of AIDS on individuals and families. The NSP requires that all those involved in the response redouble their efforts, take on more complex and controversial strategies, and work with each other in a more coordinated way. Significant investments will therefore be made to improve the capacity of those involved, both in terms of systems and infrastructure development as well as in the improvement of skills of all those involved. With the introduction of more ambitious targets and more complex interventions also comes the need to effectively monitor and evaluate all aspects of the response, and a detailed M&E plan is incorporated into this NSP.

The NSP is also based on a comprehensive costing exercise, designed to be harmonized with the costing approaches of the Ministry of Health. Over the period 2009–2012, it is calculated that the implementation of the NSP will cost U.S. $887 million. In the most likely projected funding scenario, an estimated U.S. $493.2 million will be available from the government and external donors, meaning that as of the publication of the plan, a funding gap of U.S. $394 million will need to be mobilized to ensure that the NSP is implemented in its entirety.

ACRONYMS

ADB	African Development Bank
ANC	Ante-natal consultations
ART	Anti-retroviral therapy
BCC	Behavior Change Communication
BSS	Behavioral Sentinel Surveillance
CAMERWA	Centrale d'Achat des Médicaments Essentiels du Rwanda (Central Agency for Procurement of Essential Medicines)
CBO	Community based organization
CCM	Country coordinating mechanism
CDLS	Comité de District de Lutte contre le Sida (District AIDS Committee)
CHAT	Country Harmonization and Alignment Tool
CHH	Child-headed households
CHW	Community health worker
CNLS	Commission Nationale de Lutte contre le Sida (National AIDS Commission)
CSO	Civil society organization
CT	Counseling and Testing
DHS	Demographic and Health Survey
DOTS	Directly observed treatment—short course
EDPRS	Economic Development and Poverty Reduction Strategy
EID	Early Infant Diagnosis
FBO	Faith-based organization
FOSA	Formation Sanitaire (health facility)
FP	Family Planning
GBV	Gender based violence
GDP	Gross Domestic Product
GF/MAP PMU	Global Fund/MAP Project Management Unit
GIPA	Greater involvement of people living with HIV/AIDS
GLIA	Great Lakes Initiative against AIDS
HBC	Home Based Care
HCC	Health Communication Center
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HSSP	Health Sector Strategic Plan
IEC	Information, Education, Communication
IGA	Income generating activity
IMCI	Integrated Management of Childhood Illnesses
LNGO	Local Nongovernmental Organization
M&E	Monitoring and Evaluation
MAP	Multi-sectoral AIDS Project
MARP	Most at risk population
MCH	Maternal Child Health
MDG	Millennium Development Goals
MIGEPROF	Ministry of Gender and Family Promotion
MINAFET	Ministry of Foreign Affairs
MINALOC	Ministry of Local Government, Community Development and Social Affairs
MINECOFIN	Ministry of Finance and Economic Planning
MINEDUC	Ministry of Education
MINIYOUTH	Ministry of Youth
MISPOC	Ministry of Sport and Culture

MoH	Ministry of Health
MOT	Modes of Transmission
MSM	Men who have sex with men
NCBT	National Center for Blood Transfusion
NGO	Nongovernmental organization
NIS	National Institute of Statistics of Rwanda
NSP	National Strategic Plan for HIV/AIDS
OI	Opportunistic Infection
OVC	Orphans and vulnerable children
PBF	Performance based funding
PEP	Post exposure prophylaxis
PEPFAR	Presidential Emergency Plan For AIDS Relief
PIT	Provider Initiated Testing
PLHIV	People living with HIV/AIDS
PMTCT	Prevention of mother to child transmission of HIV
PWD	People with disabilities
RCLS	Réseau des confessions religieuses dans la lutte contre le Sida (Network of faith based organizations against AIDS)
RH	Reproductive Health
RRP+	Réseau Rwandais des personnes vivant avec le VIH (Rwandan network of people living with HIV)
RSPA	Rwanda Service Provision Assessment
RWANARELA	Rwanda Network of Religious Leaders Living with AIDS
SE-CNLS	Secrétariat Exécutif de la Commission Nationale de Lutte contre le Sida (Executive Secretariat of the National AIDS Commission)
SOP	Standard Operating Procedures
STI	Sexually Transmitted Infection
TBA	Traditional birth attendants
ToT	Training of Trainers
TRAC Plus	Treatment and Research AIDS Centre Plus
UNAIDS	Joint United Nations Program on AIDS
UNDP	United Nations Development Program
UNFPA	United Nations Fund for Population
UNGASS	United Nations General Assembly Special Session on HIV/AIDS
UP	Universal precautions
UPHLS	Umbrella des personnes handicapées dans la lutte contre le Sida (Umbrella of people with disabilities in the fight against AIDS)
USG	United States Government
VCT	Voluntary Counseling and Testing
WHO	World Health Organization
YFS	Youth friendly services

PART
1

Introduction and Situation Analysis

1. INTRODUCTION

1.1—ABOUT THE NATIONAL STRATEGIC PLAN ON HIV/AIDS, 2009-2012

This National Strategic Plan on HIV/AIDS (NSP) describes how the unique challenges that HIV/AIDS pose to Rwanda's economic and social development will be addressed. With an estimated 3% of the adult population infected with HIV (1), Rwanda is much less affected than other countries in the region. Nonetheless, HIV transmission is far from being under control. And although nearly 80% of those in need are already receiving ART (2), the social, economic and health burden of HIV/AIDS on those affected is a heavy one.

This is why, in this NSP, Rwanda has set ambitious targets, which aim to make universal access to HIV prevention, treatment, care and support a reality. The overarching results that this plan will achieve by 2012 are as follows:

- The incidence of HIV in the general population is halved by 2012.
- Morbidity and mortality among people living with HIV are reduced.
- People infected and affected by HIV have the same opportunities as the general population.

The NSP is closely aligned with Rwanda's Economic Development and Poverty Reduction Strategy 2008–2012 (EDPRS) (3), which is the medium term strategy for achieving Rwanda's Vision 2020. The multi-sectoral EDPRS includes the Health Sector Strategic Plan (HSSP II) (4), which is also one of the bases of the NSP.

The NSP will help to achieve the EDPRS targets of reducing the proportion of the Rwandan population living below the national poverty line from 57% to 46%, on the way to achieving the Vision 2020 goal of 30% living below the national poverty line. It will contribute to progress towards raising life expectancy from 51 years in 2000 to 55 years in 2020. The NSP will also keep Rwanda well on the path to surpassing the Vision 2020 target of keeping HIV prevalence below 8%.

The NSP is the reference document for all sectors, institutions and partners involved in the fight against HIV/AIDS, outlining the contribution required of each in order to ensure that Rwanda achieves the ambitious results that it sets out. The NSP calls on these actors not only to scale up their efforts to fight HIV/AIDS, but

RWANDA VISION 2010

- Life expectancy has increased from 51 years to 55 years
- The proportion of Rwandas living below the poverty line has decreased to 30%
- HIV prevalence among 15- to 49-year-olds below 5%

- **EDPRS 2012**
  - » The proportion of Rwandans living below the poverty line has decreased from 57% to 46%
  - » The proportion of Rwandans living in extreme poverty has decreased from 37% to 24%
  - » Incidence of HIV in the general population is reduced to 0.5%

  - » **NSP 2009–2012**
    - The incidence of HIV in the general population is halved by 2012
    - Morbidity and mortality among people living wtih HIV are significantly reduced
    - People infected and affected by HIV have the same opportunities as the general population

Figure 1—How the NSP contributes to EDPRS and to Vision 2020

also to improve, and even transform their approaches so as to ensure the national response is both relevant and effective. This will be challenging because it will require a change of mindset for all of the actors involved in the response to HIV/AIDS.

The NSP is based on an in-depth analysis of epidemic trends, a review of Rwanda's response to HIV from 2005 to 2008, and a review of global evidence on the most effective strategies. It reflects the most up-to-date knowledge and analysis of the epidemic, builds on established good practices and addresses the weaknesses and the lessons learned in the response to date.

1.2—DEVELOPMENT OF THE NSP

1.2.1—Process for Development of the NSP

A number of important analytical initiatives took place during the period 2007–2009, together forming a robust basis for the development of the new NSP. The purpose of these initiatives was to enhance the understanding of the determinants of the spread of HIV in Rwanda; the nature of the impact of HIV/AIDS; the strengths and weaknesses of the national response to HIV/AIDS to date; and the overall context within which the response to HIV/AIDS takes place. Many of these initiatives were carried out with the active involvement of stakeholders from different sectors, including civil society organizations.

The NSP was developed between January and March 2009. The process, which was led by the Executive Secretariat of the National AIDS Commission (commonly known by its French abbreviation "SE-CNLS"), was designed to ensure broad participation in both the interpretation of the various analyses described above, and the development of priorities and implementation strategies for the new plan. The key stages in the process were as follows:

1. *Design and preparation of the NSP development process*: The process was designed by the SE-CNLS. As well as defining the remaining stages, timelines and modalities for ensuring participation at the appropriate stages, the SE-CNLS consolidated the key findings of the analytical work carried out in preparation for the strategic planning process, and reviewed evidence of effective HIV interventions from Rwanda and globally.
2. *Workshop*: Know your epidemic; know your response (January 20–22, 2009). The aims of this workshop were to analyze the HIV epidemic in Rwanda; review the national, regional and global evidence base for a number of key strategies to fight HIV/AIDS; and define priorities for the next plan. Over 100 participants attended the workshop, representing all of the main government sectors, the key agencies involved in the response to HIV/AIDS, civil society organizations, district AIDS coordinators, and technical and financial partners.
3. *Definition of strategic outline*: Internal work carried out by the SE-CNLS team, and consultations with the Center for Treatment and Research on HIV/AIDS, Malaria, Tuberculosis and other epidemics (TRAC Plus), and the Rwandan national network of people living with HIV (RRP+), in order to define the overall outline and vision for the NSP.
4. *Workshop*: Strategic planning (January 27–29, 2009). During this workshop, stakeholders defined the key results and strategies to achieve them for inclusion in the new NSP. The workshop was attended by the same participants as the Know your epidemic; Know your response workshop.
5. *Development of operational details*: The key details include the following: targets; resource needs analysis; operational plan; budget; monitoring and evaluation plan. These were developed through ongoing consultations with the relevant agencies and partners, including an operational planning workshop from March 2–5, 2009. The workshop also ensured harmonization of the NSP with the Health Sector Strategic Plan II and health sector plans for HIV and tuberculosis.
6. *Situation analysis of the role of civil society in the response against HIV/AIDS in Rwanda*: In order to better describe civil society's role in the national HIV response, a thorough process has been undertaken by the coordinating agencies of Civil Society Umbrellas (CSO) to analyze the present contribution of this sector to the HIV response and to identify the gaps and needs for the strengthening of the sector.
7. *Finalization of the NSP*: The plan was drafted and finalized on the basis of the inputs described above, by a team made up of SE-CNLS staff and resource people from the Clinton Foundation, MEASURE Evaluation, UNAIDS, and UNDP. Validation of the final plan was ensured by ongoing consultation with all the main actors

Box 1—Key Initiatives Informing the Development of the NSP

- **Consultations for development of UNGASS Country Report and National Composite Policy Index 2006-2007**: broad, multi-sectoral consultations to report on progress and gaps in fulfilling UNGASS commitments on HIV (January 2008).
- **Integration of HIV into the Economic Development and Poverty Reduction Strategy 2008-2012**: collaborative process with ministries, development partners and civil society to develop overarching goals for the response to HIV by 2012 and to define how key development sectors must contribute to the HIV response (April 2008).
- **Rwanda Country Harmonization and Alignment Tool (CHAT) Final Report**: assessment of extent of national and international partners' mobilization, participation and inclusiveness in national response. The report assesses the degree of harmony and alignment of the national response and how any identified gaps can be filled (April 2008).
- **Rwanda Service Provision Assessment Survey 2007**: survey on availability and quality of facility infrastructure, resources and management systems, including capacity of facilities to provide quality HIV/AIDS services (September 2008).
- **Rapid situation analysis on condom programming in Rwanda**: rapid assessment designed to identify gaps and recommendations for a national condom programming strategy (September 2008).
- **Rwanda District Health System Strengthening Framework**: undertaken by the Ministry of Health. A Framework was developed and on that basis, detailed plans and analysis were developed with each district. Provides a full picture of the current state of the health system, and provides strategies to improve the system and the investment and operational costs required.
- **Training in Results Based Management**: Training organized by UNAIDS setting out the principles for results based planning and management of the new NSP. Training was attended by actors from all sectors including civil society (2008).
- **Rwandan HIV/AIDS Data Synthesis Project**: data triangulation exercise based on the most up to date epidemiological and behavioral data, aimed at defining high-risk populations by geography and risk behavior and defining the required reach and intensity of programmatic responses (December 2008).
- **Development of the HSSP II, the national strategic plan for tuberculosis, and the strategic plan for HIV/AIDS of TRAC plus**: agency responsible for biomedical aspects of the response to HIV/AIDS (December 2008).
- **Incidence modelling to better understand the Rwandan HIV epidemic (Modes of transmission model)**: modelling expected distribution of new HIV infections by exposure group (January 2009).
- **Joint Review of the National Multi-sectoral HIV/AIDS Strategic Plan 2005-2009**: joint review carried out by key stakeholders in the response to HIV/AIDS to assess progress and achievements of the implementation of the 2005-2009 plan; relevance of the response; effectiveness of interventions; gaps; constraints; lessons learned; priorities for the next plan (March 2009).
- **EPP/Spectrum estimates: mathematical models used for making national HIV estimates and projections**: Estimates were conducted in March 2009. CNLS, TRAC Plus, NISR, UNAIDS, WHO, UNICEF, CDC and MEASURE Evaluation participated.

during the finalization of the document, by thorough analysis of the document by a group of peer reviewers at national and international levels and by a validation meeting including all the main stakeholders of the national HIV response.

1.2.2—Results-Based Planning

An important observation to emerge from the Joint Review of the NSP 2005–2009 (6) was that the previous NSP was largely defined according to activities and the provision of services, rather than focusing on the impact of those activities and services in terms of improved health outcomes in the Rwandan population. It was found that different components of HIV/AIDS programs were often implemented in a fragmented way by implementers specializing in each activity or service, making them harder to coordinate and compromising their effectiveness.

In order to ensure a clearer focus on health outcomes, and shared accountability for these outcomes among the different actors, a results-based approach was adopted for the development of the new NSP. The approach ensured increased rigor in the prioritization

and selection of strategies and interventions, linking the use of evidence, participation of all key stakeholders, and realistic appraisals of the resources required to achieve the desired results. The approach also helped to more clearly illustrate the interdependence of different strategies and interventions and therefore the necessity of implementing programs in a comprehensive manner. It is also anticipated that this approach will strengthen multi-sectoral action, as it helps identify where different sectors have an essential role to play in achieving results.

1.3—THE NATIONAL STRATEGIC PLAN FOR HIV AND AIDS AND OTHER COMMITMENTS

1.3.1—Global Commitments

Rwanda has made a number of commitments at the global level that provide an overall context for efforts to fight HIV/AIDS. These include the Millennium Development Goals, toward which Rwanda is making impressive progress (7). Achieving the results outlined in the NSP will not just help to achieve the goal of combating HIV/AIDS (MDG number 6) but will also strengthen Rwanda's chances of achieving all of the other Millennium Development Goals, since the spread and the impact of HIV/AIDS are so closely related to other aspects of development. Reaching the NSP and EDPRS target of 0.5% HIV incidence by 2012 will ensure that Rwanda stays on track to achieving its MDG target for 2015 of stabilizing HIV prevalence at 3%. Rwanda is also making progress toward achieving its commitments under UNGASS, with its strong progress toward achieving Universal Access (8).

1.3.2—Economic Development and Poverty Reduction Strategy (EDPRS) and Other National Plans

In 2006, Rwanda began the process of developing a new Economic Development and Poverty Reduction Strategy (EDPRS) (3) covering the period 2008–2012 (see Box 2). The EDPRS is Rwanda's medium term strategy to increase the wellbeing of all citizens as outlined in Rwanda's Vision 2020. It is a national strategy that was developed with the involvement of all levels of Rwandan society including the participation of ministries, districts, donors, civil society, private sector, and the media. Recognizing that the national response to HIV/AIDS had been largely focused in the health sector, the SE-CNLS, in collaboration with UNDP and UNAIDS, formed a task team in early 2006 to lead the overall process of integrating HIV into the EDPRS, providing ongoing technical support to sectors to ensure HIV was incorporated in plans for each sector (9). The result is the inclusion of key HIV/AIDS activities in each of the sectoral plans, as well as a set of high-level national targets in relation to HIV/AIDS, to be achieved by 2012. These targets are one of the main starting points for the development of the present NSP, and are reflected in the monitoring and evaluation framework of the Plan.

Although the EDPRS integration process has strengthened the multi-sectoral approach to fighting HIV/AIDS, the health sector clearly is still one of the most important sectors in the response. Consequently, two other national plans are of particular relevance for the development of the NSP 2009–2012: the second Health Sector Strategic Plan 2008–2012 (HSSP II) (4) and the Strategic Plan of TRAC Plus HIV, AIDS and STI unit (HAS) (10), the unit within the Ministry of Health which is responsible for coordinating biomedical aspects of the national response to HIV/AIDS.

The two plans provide a number of additional specific targets to be achieved by the health sector in relation to HIV/AIDS. These two plans also provided important starting points for biomedical aspects within the NSP 2009–2012, and the targets set in these plans are also reflected in the monitoring and evaluation framework.

Box 2—Rwanda's Economic Development and Poverty Reduction Strategy 2008-2012

Rwanda's Economic Development and Poverty Reduction Strategy (EDPRS) is both a document and a process. As a document, the EDPRS sets out the country's objectives, priorities and major policies for the next five years (2008-2012). It provides a road map for government, development partners, the private sector and civil society and indicates where Rwanda wants to go, what it needs to do to get there, how it is going to do it, what the journey is going to cost and how it will be financed. The strategy provides a medium term framework for achieving the country's long term development goals and aspirations as embodied in Rwanda Vision 2020 (Republic of Rwanda, 2000), the seven-year Government of Rwanda program, and the Millennium Development Goals.

1.4—OUTLINE OF THE NSP 2009-2012

The NSP is structured as follows:

- *Part 1:* provides background to the planning process, a country overview and situational assessment based on the most up to date epidemiological and social analyses of HIV/AIDS in Rwanda, and a summary of the Joint Review of the last NSP.
- *Part 2:* describes the strategic approach and the overarching principles that underpin the response to HIV/AIDS. The strategy description explains how results will be achieved within different population groups, and how they will combine to have an overall impact.
- *Part 3:* provides a detailed description of coordination, governance and implementation arrangements for the plan.
- *Part 4:* describes how M&E of the NSP will be carried out, as well as providing information on the Impact, Outcome, and Output level indicators that will be used to measure progress, the targets to be achieved and the systems that will be used to ensure data are collected.
- *Part 5:* summarizes costing information and presents the overall budget of the plan according to results, implementers and cost categories.
- *References:* lists key references that have informed the development of the NSP.

2. COUNTRY CONTEXT AND SITUATIONAL ANALYSIS

2.1—COUNTRY OVERVIEW

2.1.1—Social, Demographic and Economic Characteristics

Rwanda is a small, landlocked country in East Africa, bordered by Burundi, the Democratic Republic of Congo, Tanzania, and Uganda. The country is administratively divided into five provinces (Kigali, North, South, East and West) and 30 districts. With an estimated population of over 9,200,000 and a population density of 351 persons/square km, Rwanda is the most densely populated country in Africa. The urban population is estimated to be 21.8% and is growing.

The population is relatively young with 43.5% of the entire population under 15 years old and 55.2% in the 15-49 year age bracket. The median age is 19 years and life expectancy at birth is 53.1 years. Rwanda has one of the highest fertility rates in sub-Saharan Africa, with 6.1 children per woman.

Rwanda's gross domestic product (GDP) per capita is U.S. $272; 57% of the population lives below the national poverty line and 37% live in extreme poverty. Although in terms of percentages these figures show a slight decrease in poverty in recent years, because of population growth the absolute numbers of people in poverty have increased. In the most recent UNDP Human Development Report, Rwanda was ranked 161st out of 179 countries on the Human Development Index (11).

In the aftermath of the genocide and associated conflicts (1996–2000), real GDP grew at over 10% per year as the economy recovered from a low base. This was followed by a period of stabilization (2001–2006) during which real growth fell to an annual rate of 6.4%. On the demand side, growth has been driven predominantly by increases in private consumption. On the supply side, there has been a structural shift in the economy as the Service Sector replaced agriculture as the major contributor to increases in output. However, agriculture (and food crops in particular), remains a major component of GDP and provides most employment.

Inequality, measured according to the relative concentration of wealth in the population, is very high in Rwanda and increased overall during the period 2000 to 2006 (with rural areas in particular accounting for this increase).[1] Poverty is highest among households whose main source of income is agricultural wage labor. Those who have been in these jobs for a long time constitute the core of extreme poverty in Rwanda.

Vulnerable households (headed by women, widows and children) represented 43% of all households in 2006 (against 51% in 2001) and were concentrated in rural areas. Poverty levels among these vulnerable groups fell, showing some support for the effectiveness of policies designed to reach the most vulnerable in society. However, poverty among vulnerable households is around 60% and higher than average, indicating that vulnerability remains a serious concern.

Recent years have seen progress on gender equality, as indicated by both girls' primary school enrollments and women's representation in parliament, where Rwanda has the highest proportion of female parliamentarians in the world (55%). However, much remains to be done. Much violence against women, such as rape and domestic assault, goes unreported and hence unpunished. And there remain problems with the Land Law: women who are not legally married have no legal entitlement to their husband's land. Efforts by local communities with regard to encouraging couples to legalize their marriages are yielding fruits through group marriage ceremonies. The pending Violence against Women Law will need support for its implementation, particularly local mechanisms to protect women who report their husbands.

2.1.2—Genocide and Conflicts

The 1994 genocide and the conflicts between 1996 and 2000 destroyed Rwanda's delicate economic base and

1. Inequality is measured by the Gini coefficient—the higher the coefficient, the more concentrated incomes are among a few people. The coefficient for Rwanda increased from 0.47 to 0.51 over the period 2001-2006. Kenya is the only country in the East African Community to have higher inequality than Rwanda according to this measure.

severely impoverished the population, particularly women, leaving them disproportionately affected because of their economic, social, and sexual vulnerability. Other consequences include major changes in the age structure of the population and the return of many Rwandans following the genocide and conflicts. As a result of continued conflicts in neighboring countries there are currently at least 30,000 refugees in camps in Rwanda.

Although poverty levels remain high, Rwanda has made progress in stabilizing and rehabilitating its economy to pre-1994 levels. The government is focused on increasing production and reducing poverty while creating an environment of good governance.

2.2—THE HEALTH SYSTEM IN RWANDA

2.2.1—National Health Strategy

The government of Rwanda's health strategy, is based on a number of overall targets set out in the EDPRS, and is elaborated in detail in the recently developed second Health Sector Strategic Plan 2009–2012 (HSSP II) (4). The strategy is centered around:

- primary health care;
- decentralization;
- community participation;
- human resource development;
- strengthening the health information system; and
- inter-sector approach to health.

The overall targets set out in the EDPRS aim at preventing illness and disease, and building capacity to provide accessible and high quality care services to all, in order to reduce malnutrition, infant and maternal mortality, fertility, and to strengthen the fight against communicable diseases. The HSSP II focuses on ensuring the strengthening of institutional capacity, and increasing the quantity and quality of human resources, to ensure that health care is accessible to the entire population, to increase the availability and accessibility of drugs, improve the quality of services in the fight against diseases and hold up the demand for such services. The following information on the health system in Rwanda is taken from the HSSP II (4).

2.2.2—Key Health Indicators in Rwanda

Recent years have shown clear improvements in some of the core health indicators. The maternal mortality rate has come down from 1,071 per 100,000 live births in 2000 to 750/100,000 live births in 2005, which is still very high and a long way from Rwanda's vision of 200/100,000 live births by 2020. The main challenges to further bringing down maternal mortality are the low levels of female literacy, and the under utilization of reproductive health services (currently, 52% of births are attended by a health professional). Infant mortality rates have dropped from 107/1,000 live births in 1999 to 62/1,000 live births in 2007—another significant improvement towards the Vision 2020 target of 50/1,000 live births. A combination of neonatal causes, pneumonia, malaria, diarrhea, HIV/AIDS and malnutrition (45% of children under five suffer from chronic malnutrition) contribute significantly to levels of infant and child mortality.

Other significant improvements include an increase in the percentage of the population with access to clean drinking water, currently at 64%, and an increase in the percentage of women between 15 and 49 year using modern contraceptive methods from 10% to 27% in only three years. HIV/AIDS and malaria are the diseases which cause the heaviest burden on the health system. Malaria is endemic and is the leading cause of death, and HIV prevalence in the general population is estimated at 3%.[2]

2.2.3—Human Resources for Health

Rwanda has also made progress in strengthening its health system in recent years, and indeed, Rwanda is recognized as having effectively ensured that disease-specific funding and programs are designed in a way that strengthens the health system as a whole. However, much more remains to be done. The number of health professionals is still inadequate: the proportion of facilities which meet minimum staffing and equipment norms is currently at 30%. New staffing norms, based on the actual workload at every facility, were agreed in 2008.

Moreover, while substantial efforts are still needed to increase the quantity of health professionals to meet the new staffing norms (in particular for medical doctors), more emphasis needs to be put on quality of trained professionals and their distribution over the country. The insufficient number of midwives in the country, particularly in the rural areas, is one of the biggest challenges that needs to be dealt with in order for the country to address the high maternal mortality. Acute

2. Further details on HIV are provided in the next section.

shortages in human resources are particularly felt in specialties such as surgery, nutrition, disabled care, environmental health, and maintenance of medical equipment.

2.2.4—Health Facilities

Rwanda has made progress in improving accessibility of health facilities; the norm of the Ministry of Health is that all Rwandan's should be within a one hour walk of a health facility, which is currently the case for 58% of the population. Each district is supposed to have at least one hospital, each sector at least one health centre, each cell at least one health post and every village should have at least one male and one female Community Health Worker. Recent years have seen investments in the construction of new facilities and transportation. However, the lack of equipment maintenance programs puts the infrastructure in jeopardy, and 22% of facilities do not have access to electricity.

2.2.5—Health Financing

The dependence of the health sector on external aid is still high. Indeed, 53% of total financial resources of the health sector come from external donors, 28% from the private sector and 19% from the government. Though below the target of 12%, the percentage of the total government budget spent in the health sector has increased from 8.2% to 9.1% in 2006-2007, which is an increase of U.S. $6 to U.S. $11 for total health spending per capita; that is to say U.S. $5 lower than the target of U.S. $16. The review of public expenditure in the health sector for 2006–2007 shows, in general, a good level of absorptive capacity of funds for the health sector (96%).

Although there are no accurate estimates of the burden of health expenditure on households, it is clear that the population currently supports a significant proportion of healthcare costs, creating barriers to access for the poorest. Reduction of financial barriers to accessing health services has greatly improved through the implementation of a community-based health insurance system (Mutuelles de Santé), which allows the majority of the population to access care services and drugs, for an annual contribution of RWF 1000 (less thanU.S. $2) per person.

Seventy-four percent of the population is now covered by the Mutuelles de Santé, and the Ministry of Health, with the support of development partners, supports the free care of indigents, which brings the proportion of the population covered to 83%. However, contributions to healthcare costs and access to healthcare are still largely inequitable, as user fees and health insurance premiums are regressive in nature. Hence, many poor people still have limited access to healthcare, in particular specialized or hospital care.

The issue of financial sustainability for the health system in the long term is of concern as a significant proportion of health expenditure is funded by external sources and as health programs are often suddenly stopped when external funding dries up. At the same time the Ministry of Health is seeking to scale up new directions in health financing, for instance the use of performance-based funding of health facilities (based on outputs rather than inputs), as a means of improving quality.

2.2.6—Key Institutions Involved in the Health Sector in Rwanda

Apart from the Ministry of Health which is the lead agency for the health sector with direct responsibility for key functions such as policy, service delivery, coordination, and monitoring and evaluation, around 15 other ministries implement activities that either directly or indirectly impact health. In addition, a large number of agencies have responsibility for specific health problems or interventions such as AIDS (National AIDS commission), drug procurement (CAMERWA), and the higher level health training institutions to name a few.

A substantial proportion of all health services in Rwanda are provided by faith-based organizations. There are also numerous international and some national NGOs involved in the health sector in Rwanda, in particular in providing HIV/AIDS services in the districts. Finally, the sector receives substantial support from a range of development partners—as noted above, 53% of health financing comes from external sources.

2.2.7—Health Systems Challenges

The integrated health surveillance system needs to be improved. There is insufficient capacity for epidemic and disaster preparedness, management and response, both at the national and district level. Information and communication systems do not provide adequate support at the district level: information collection, analysis, feedback, as well as utilization of data for planning and management are sub-optimal. WHO priority infectious diseases (other than HIV/AIDS, malaria and TB) and other neglected tropical diseases are not sufficiently addressed. The weakness of information systems also impacts negatively on referrals and follow up. Although availability of quality drugs, vaccines and

consumables in the health facilities has improved, stock-outs of medicines still occur both at the national and district level, due to a number of reasons, among them lengthy procurement procedures, lack of a national Logistical Management Information System, insufficient funds and inefficient financial management. Costs are not always recovered and health facilities cannot provide non-subsidized drugs and consumables. Patients do not always receive correct treatment, due to non-rational use of drugs, which can also lead to side effects, resistance, drug dependency, increased costs and prolonged hospital stays.

This sub-sector suffers from the lack of a regular coordination mechanism, as there is no National Drug Agency and no Technical Working Group (TWG) on Pharmaceuticals. The procurement system is weak, due to absence of standardized procurement procedures. While a national pharmaceutical policy has been elaborated, there is no clear drug pricing policy yet. The quality assurance system of pharmaceuticals and other commodities is considered inadequate: there is no laboratory for quality control, no registration system and the national inspection program is weak.

2.3—LEGAL FRAMEWORK AND HUMAN RIGHTS PROTECTION IN RWANDA

Strengthening access to justice is a key component of the EDPRS. Rwanda is working toward ensuring universal access to justice, in particular by increasing the efficiency of the system so as to reduce the backlog of cases. As well as strengthening the existing system, alternative justice mechanisms will be introduced, and citizens will be sensitized to new laws and mechanisms to ensure justice and protection of rights.

New legislation against gender-based violence is a precondition for ensuring access to justice for women, and will be accompanied by training of judicial personnel, police officers and prison staff on human rights, gender-based violence and the management of cases involving vulnerable and disadvantaged groups. Special attention will be given to the monitoring and protection of all human rights, in particular those of women, children, people living with HIV/AIDS, and vulnerable groups.

3. HIV/AIDS IN RWANDA

3.1—OVERVIEW OF THE HIV EPIDEMIC

3.1.1—Prevalence of HIV Infection

The last population-based survey on HIV prevalence was the Rwanda Demographic and Health Survey 2005 (DHS 2005) (1). The survey found HIV prevalence of 3.0% (95% confidence interval: 2.6–3.5) in the general population aged 15–49. HIV prevalence in urban areas (7.3%) was much higher than in rural areas (2.2%); and HIV prevalence in women (3.6%) was significantly higher than in men (2.3%).

HIV prevalence data are also sourced from sentinel surveillance of pregnant women attending ante-natal consultations (ANC). During the most recent survey (2007) (12), HIV prevalence in pregnant women was 4.3% (3.8–4.5). Like the DHS data, the ANC data show significantly higher HIV prevalence in urban sites than in rural sites (Figure 2). Although older age groups are progressively more likely to be infected, the percentage of young pregnant women who are HIV infected remains very high, particularly for the 15–19 age group in Kigali. Both the DHS 2005 and the ANC 2007 data show regional variation in HIV prevalence (more details are provided below).

HIV prevalence surveillance in antenatal clinics has been carried out since 1988, providing some indication of trends over time. Although there has been a decrease overall since 2003 (5.2% HIV prevalence), the estimate for 2007 was higher than that for 2005 (4.3% compared to 4.1%). HIV prevalence among women who are pregnant for the first time provides a good proxy for trends in HIV incidence. HIV prevalence among women in the sample who were pregnant for the first time was higher in the ANC 2007 (3.6%) than in the

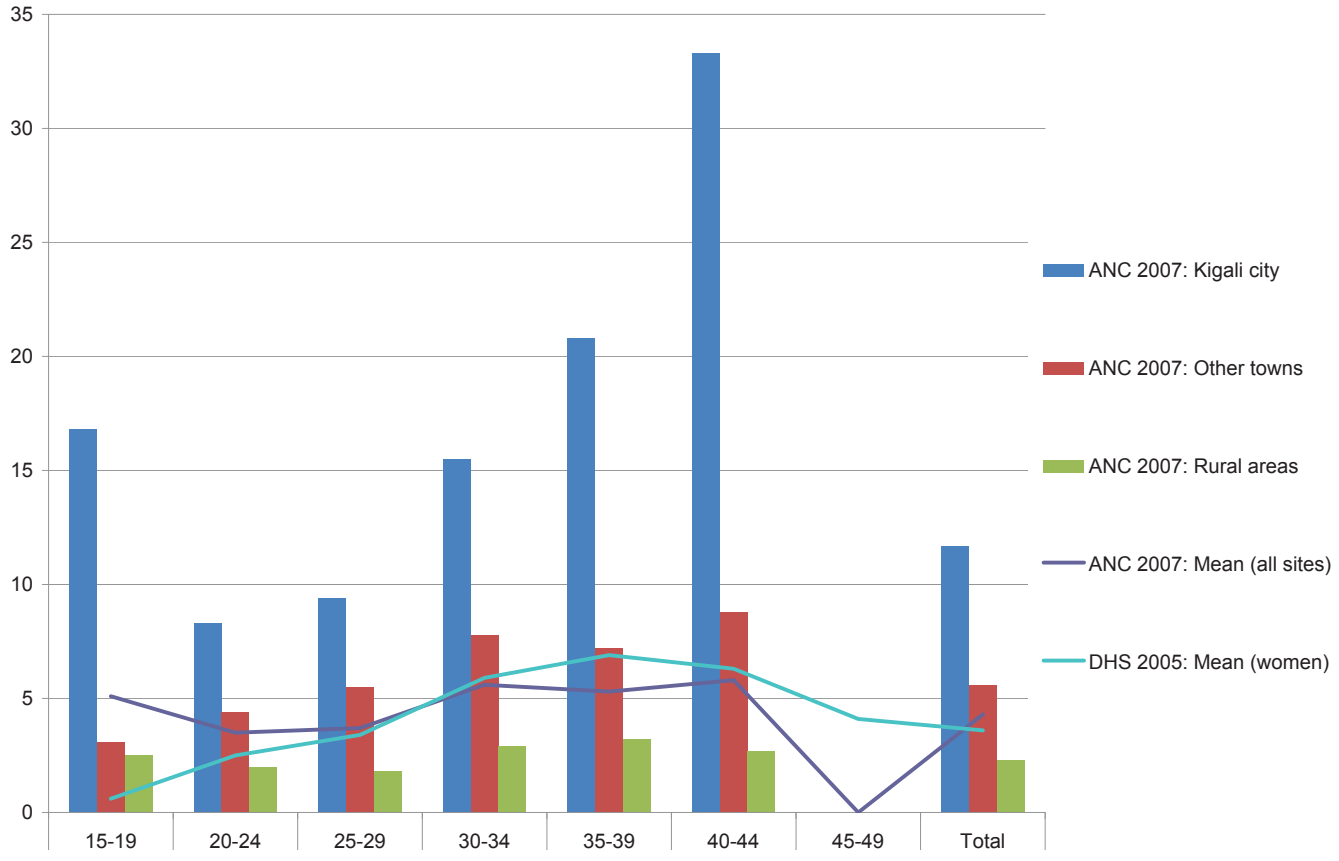

Figure 2—HIV prevalence in pregnant women attending ANC in 2007, and women in the general population 2005, by age group (TRAC plus 2008, DHS 2005).

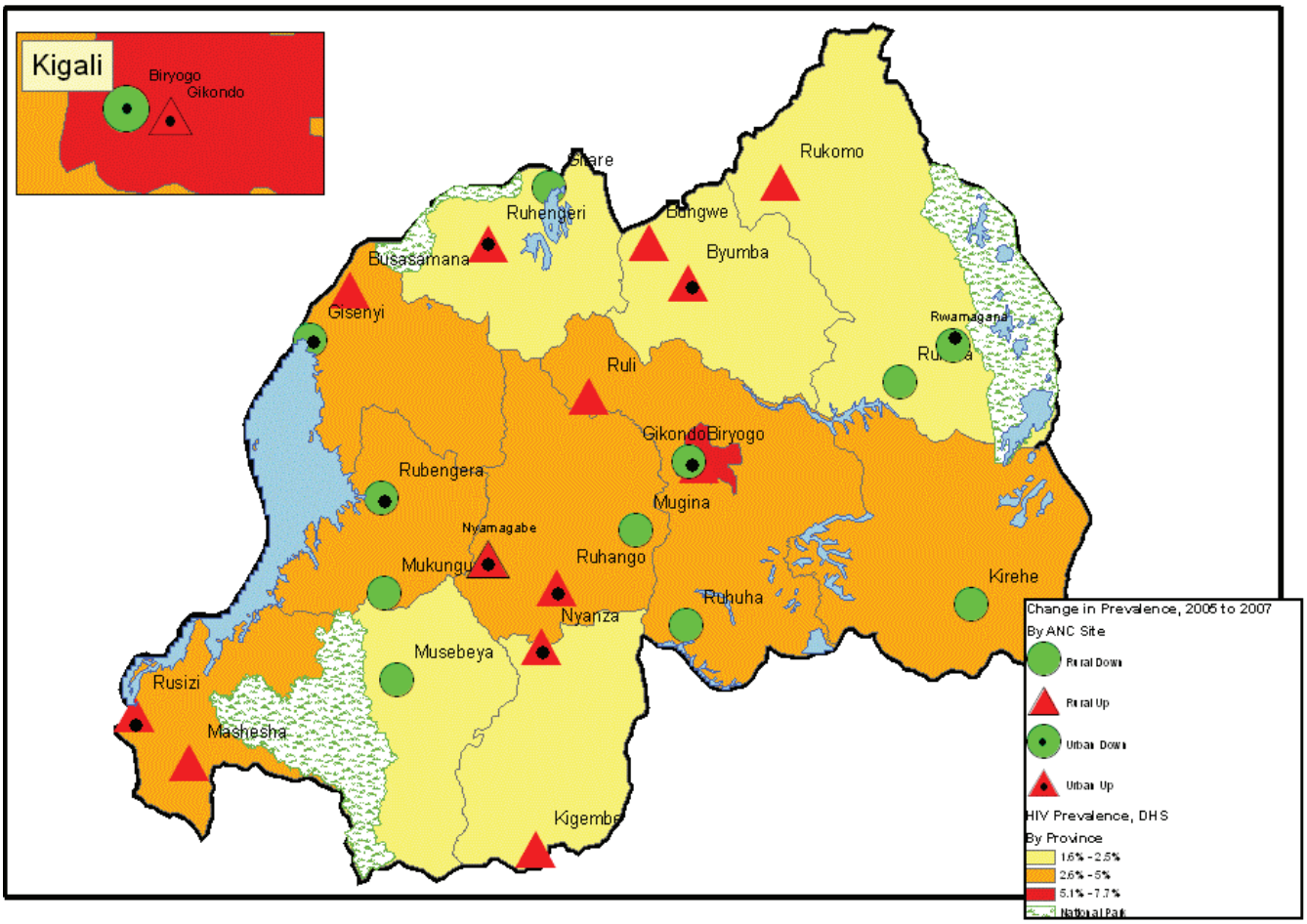

Figure 3—HIV prevalence by province based on DHS 2005 and change in ANC sentinel surveillance sites from 2005 to 2007, by urban and rural site (TRAC plus, 2008).

ANC 2005 (2.9%).[3] Although these increases are not statistically significant, they show that there has almost certainly been no improvement in the situation in recent years. An analysis of trends in individual sentinel surveillance sites over the same period shows a very mixed picture, with no obvious pattern of increases or decreases in HIV prevalence according to the geographic location, to whether the surveillance site was urban or rural, or to the estimated population HIV prevalence in the site (Figure 3).

3.1.2—The Impact of HIV in Rwanda

According to the Rwanda 2008 Epidemic Update (13), the total estimated number of people living with HIV in Rwanda was about 149,000 in 2008, including around 17,000 children. The estimated number of AIDS-related deaths in 2008 was about 7,100. Among adults (15+ years old), about 75,000 were estimated in need of ART in 2008,[4] and more than 57,000 (76%) received treatment—the target coverage for 2012 is 90%. In PMTCT, 56% of HIV-positive pregnant women received a prophylaxis regimen through December 2008. The target coverage for 2012 is 90%. It is estimated that 11% of infants born to HIV positive mothers are HIV infected. There are about 1,350,800 orphans and vulnerable children in Rwanda between the ages of 0 and 17(1). It is estimated that AIDS accounts for nearly a fifth of these: the number of children (0–14-years-old) having lost one or both parents because of HIV was estimated to be about 203,000 in 2008 (13). As already noted, women are disproportionately affected by HIV infection. In addition, a recent study (5) showed that HIV positive women are more likely to be in extreme poverty (50.2% live on less than U.S. $1 a day) than

3. Difference is not statistically significant, p>0.05.

4. This estimation is based on initiation of treatment at CD4 <200. With the new threshold of CD4<350, the number of people in need and the target for coverage have to be modified.

HIV positive men (38.6%); and the proportion of HIV positive people who have not had any formal education is also higher among women (18.5%) than men (12.2%). Around 20% of people living with HIV of either sex are unemployed and not working at all; 37.2% of respondents reported that they had been refused employment opportunities as a result of HIV status.

According to the same study, over 40% of people living with HIV have been excluded from a social gathering in the past year, over 50% have been insulted or threatened, and over 20% have been physically assaulted. In all cases women living with HIV are more affected than men. In each case, HIV status was perceived as being the cause of discrimination or abuse by the majority of respondents. In addition, 24% of respondents reported that their HIV status had caused their family to be discriminated against. Rights violations can occur in the context of access to health services for people living with HIV. For instance, 13.8% reported that ART had been provided conditional on the use of certain forms of contraception.

According to the 2002 General Population Census, there were at the time 308,500 people living with disabilities, representing around 3.9% of the general population. This group is particularly vulnerable because of their marginalization related to their disability that makes them more prone to be victims of abuse and less easy to reach through regular information campaigns and general services. People living with HIV are particularly burdened by the costs of health care, with individual spending on out of pocket expenses related to healthcare averaging 20% higher among people living with HIV than among the general population (8). The 2005 DHS highlighted the inability of households with orphans to meet the costs of schooling. Children living in child-headed households were experiencing the greatest difficulties. A 2006 study followed 692 young heads of household and noted, among other issues, their difficult living conditions, the problems in accessing education, and the psychological distress suffered by many orphans and vulnerable children.

3.2—DETERMINANTS OF THE SPREAD OF HIV IN RWANDA

Two studies conducted in 2008 enhanced the understanding of the determinants of HIV transmission in Rwanda: the Data Synthesis (or Triangulation) project and the Modes of Transmission incidence modeling exercise. Although gaps in the data still remain, these two studies and the other information discussed ensure that this strategic plan is based on the most nuanced possible understanding to date of the epidemiology of HIV in Rwanda.

3.2.1—Rwanda HIV/AIDS Data Synthesis Project (Triangulation)

The Rwanda HIV/AIDS Data Synthesis Project 2008 (14) was carried out from December 2007 to September 2008 with the aim of synthesizing data from multiple sources to strengthen the understanding of the dynamics of the Rwandan HIV epidemic, in particular addressing the following questions:

- What are the differences in HIV prevalence among different population groups over time? What are the potential causes for these differences?
- Are there gaps in HIV/AIDS programmatic coverage according to prevalence and/or need?

The triangulation methodology involved the analysis of overlapping data on prevalence, risk behaviors, cofactors, and programmatic response for a specific subpopulation or geographic area of concern. Over 100 independent sources of information on the HIV epidemic in Rwanda were used, including demographic and health surveys, HIV behavioral surveillance data, quantitative and qualitative research studies, and programmatic reports. Recent studies such as the sex workers mapping, studies on prisoners and truck drivers as well as the PLACE study were used for this exercise.

However, the results of many other studies done in Rwanda in recent years could not be used because of flaws in their methodology. This underlines the need for more capacity building of Rwandan researchers in the field of operational research methodology. Data from sentinel surveillance at ANC 2007 (12) were used as the basic gauge of HIV prevalence trends, while the 2005 Demographic and Health Survey (DHS) was used to look at the magnitude of HIV infection. Some of the key findings of the Data Synthesis Project are summarized on the next page.

Comparison of Rwanda with neighboring countries: Data gathered from the Great Lakes Initiative in AIDS (GLIA) show that indicators of risk in Rwanda appear to be substantially lower than those in other GLIA countries, such as Kenya, Tanzania, and Uganda.

Regional variations within Rwanda: Regional variations exist in terms of HIV prevalence and trends over time and in unique features of behavior, culture, and geography influencing local epidemic patterns. Urban sites outside Kigali show an apparent, but not always statistically significant, rise between 2005 and 2007. Rising HIV prevalence in urban ANC sites is concerning because Rwanda is rapidly urbanizing. Kigali Province, which has by far the highest levels of HIV prevalence, also has high levels of risk behavior, for instance a high percentage of people with two or more sexual partners and a higher level of young men reporting high-risk sex compared with other provinces. It is also estimated that 7.6% of stable heterosexual couples in Kigali are sero-discordant.

As noted above and shown in Figure 3, HIV prevalence among young pregnant women in Kigali is particularly high. This points to the existence of particular risk factors for sexually active young women in Kigali. These factors, along with the existence of "high risk locations" are hypothesized as being significant to the spread of HIV in Kigali Province. The prevalence of HIV in ANC sites in East Province is stable or declining, which is corroborated by the low HIV prevalence from DHS 2005 data. However, it is also apparent that the population of Eastern province have low levels of knowledge on HIV, relatively early sexual debut and high levels of risky sex, and low uptake of HIV prevention related services such as testing and condoms. It is unclear why HIV prevalence remains low in the East Province; hypotheses include that isolation and low urbanization may be contributing to the maintenance of lower levels of HIV infection.

Overall, North Province has relatively low HIV prevalence, but in most ANC sites it is increasing. Risk behaviors (multiple sex partners) are relatively low, but usage of services like testing and condoms are low in most locations. Although many sites are isolated, rapid urbanization in this province may explain increasing HIV prevalence.

Like North Province, South Province has low HIV prevalence overall, but with the ANC study indicating recent increases. The data suggest that the presence of the University of Butare in the province, as well as the existence of transport routes, seasonal workers and commercial centers, may be the key factors contributing to the epidemic in the province. The West Province has the highest HIV prevalence outside of Kigali, with even the rural ANC locations showing higher HIV prevalence than the national average. The epidemic in this province is probably more mature and less concentrated than elsewhere. There are several potential factors which could explain why this region continues with higher rates of HIV transmission. The greater economic opportunity for males resulting from the presence of tea plantations and commerce around the lake could be a risk factor contributing to a higher prevalence in the West Province.

HIV risk within specific population groups: The triangulation exercise also examined epidemic patterns within specific sub-populations. In Rwanda, 2.2% of heterosexual couples are HIV sero-discordant (around 60,000 couples), putting the HIV-negative members of these discordant couples at high risk for HIV infection. Very few programs exist that aim to identify and work with discordant couples for HIV prevention.

According to the ANC data from 2007, HIV prevalence is much lower for married women (2.5%) than for separated (14.6%), widows (9.7%), single (6.8%), divorced (6.4%), and cohabiting (5.9%) women. The pattern for women in the DHS survey is similar, although in the case of that survey HIV prevalence was higher among widows than separated or divorced women. For both men and women, HIV prevalence is slightly higher among those with more education—however this difference is small and there does not appear to be a linear relationship between the number of years of education and HIV prevalence.

The extent and magnitude of the commercial sex industry remains difficult to characterize in Rwanda. The size of the population of sex workers is unknown. Although no representative study has been conducted, the results of mobile voluntary counseling and testing (VCT) programmatic data indicate much higher HIV prevalence among sex workers than in the general population. Although a high proportion of sex workers have undergone an HIV test, risk behaviors continue to be prevalent. There are very few programs working specifically with sex workers and it is estimated that a very low proportion of sex workers are covered by effective HIV prevention programs. The criminalized nature of sex work[5] and the difficulty in capturing the phenomenon

5. Criminalization refers to legal regimes where sex work in itself is not illegal but many connected activities, such as soliciting for clients, are.

of transactional sex as a risk behavior represent two major barriers for better targeting of programmatic interventions. There is low HIV prevalence among young people aged 15-24 compared to the general population; however, young women are far more often infected than men by HIV: respectively 3.9% versus 1.1% in urban areas, and 1% versus 0.3% in rural areas. The differences in HIV prevalence between men and women aged 20-24 are particularly striking, since while in the 15-19 age group they are nearly equal (0.4% for men and 0.6% for women), in the 20-24 age group HIV prevalence is five times higher for women than for men (0.5% for men and 2.5% for women[6]), suggesting that women in this age group are particularly at risk for HIV infection—most likely becoming infected in the context of relationships with older men. In general, women become infected at younger ages than men (Figure 6).

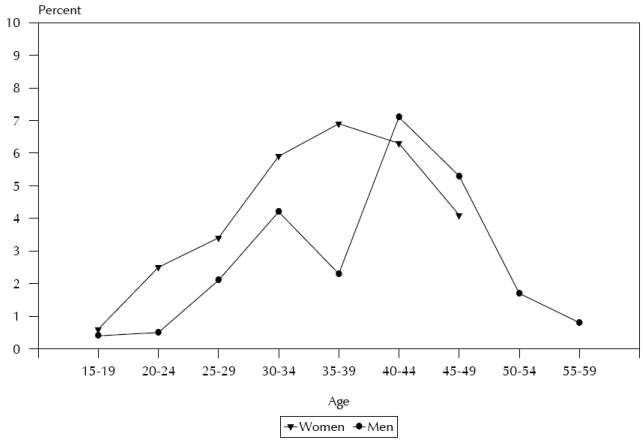

Figure 6—HIV prevalence by age group and gender (RDHS 2005).

Behavioral studies show a mixed picture, with different sources showing very different results in terms of reported knowledge, condom use, and partner exchange rates. Young people in general cannot be considered a risk group, but many incident infections occur in this age group, and some specific subgroups are clearly at higher risk and should be priority targets for HIV prevention efforts. Other sub-populations examined included prisoners, refugees and truck drivers. Although HIV prevalence in prisons does not appear to be significantly higher than outside, there is evidence of sexual activity within prisons, where condoms are unavailable and very rarely used. HIV prevalence and risk behaviors are very low in refugee camps, possibly because they are well covered by programs for the most part.

It is unlikely that refugees are a major factor in the spread of HIV in Rwanda. HIV prevalence among truck drivers appears to be higher than in the general population, although reported risk behaviors are not particularly high. Although truckers are highly mobile, they constitute a small population. They have been well reached by prevention programs to date. Continued targeting of truckers should be accompanied by targeting of other high risk men.

3.2.2—Modes of Transmission Modeling

As the distribution of HIV infections among population groups is poorly understood, MEASURE Evaluation collaborated with CNLS and other stakeholders to model the expected distribution of new HIV infections by exposure group, using the UNAIDS Incidence model in December 2008. The model assists in understanding the sources of new HIV infections and the importance of each exposure group in order to inform better planning and programming. The model is confined to a current year estimate (12 months) for defined risk groups among the adult population aged 15–49. Each member of the population 15–49 is allocated to an independent risk group, thus the model does not take into account the distribution of behaviors within a defined risk group nor does it allow for multiple risk group associations.

The model requires detailed demographic, epidemiological and behavioral data for each risk group. We first gathered existing demographic, HIV prevalence, and risk behavior data relevant to the Rwandan context. Over 100 data sources on HIV-related research, surveillance and program-level results were collected over a three-month period by a team of consultants. For the general heterosexual population, where Rwanda-specific data exists, we estimated the distribution of new infections. For other risk groups, we developed scenarios for each, varying estimations of population size and HIV prevalence to identify the likely number of new infections. The data for each scenario was extracted from international and regional data collected during the literature review. When using international data, priority was given to other countries in the East African Community (EAC). The major limitation to this study is that the model uses crude groupings of the population according to their main exposure to HIV and does not take into account the distribution of behaviors within risk groups.

6. The difference is significant at $P<0.001$.

Individuals reporting one sexual partner (last 12 months): Those reporting one sexual partner in the last 12 months are predicted to be the major contributor of new infections, with approximately 10,000 new infections in the next year. This can largely be attributed to the fact that this is the largest risk group (comprising over 1.5 million individuals). Given that the majority of individuals reporting one sexual partner in the last 12 months were either married or living with their partner (79% of all respondents; 90% of women, 70% of men [DHS 2005]), new infections will most likely be related to low condom use among steady sero-discordant couples.

Female Sex Workers: The scenario analyses demonstrate that a significant fraction of new infections may occur among sex workers—both commercial and transactional, though not enough evidence exists in Rwanda to draw solid conclusions at this time. Without further research it is difficult to distinguish the relative magnitude of commercial sex versus transactional sex and how they both contribute to new infections. Anecdotal evidence indicates that there are vastly different behaviors and practices between commercial and transactional sex workers that have not been adequately explored to date in Rwanda. Many women who engage in transactional sex may not consider themselves sex workers, thus it is extremely difficult to estimate the size of this population, or their frequency of engaging in transactional sex.

Men who have sex with men (MSM): The scenario analyses also showed that MSM may contribute a substantial fraction of new infections, even where we varied estimates of population size and HIV prevalence. When observing the contribution of predicted new infections in the three scenarios, the estimated number of new infections among the MSM community remains at approximately 15% of all new infections in all scenarios. These results make the case for further research into MSM HIV risk behaviors, including bisexual behavior among MSM and the potential for a "bridging effect" of HIV transmission.

In general, any model is only as accurate as the data that is entered into it. Given the lack of local data for many of the risk groups, interpretation of results for program planning purposes is limited; however results provide orientation for policy-makers and help in prioritizing future research and surveillance activities.

Specific recommendations include further research among MSM and sex workers to better estimate population size and HIV prevalence, and understand HIV risk behaviors; qualitative and quantitative research focused on understanding the dynamics of commercial versus transactional sex, including the frequency of these partnerships; and targeted prevention programs for the three groups predicted as major HIV transmitter groups (29).

Box 3—Summary of Results

Heterosexual transmission of HIV—85% of predicted new infections

- Individuals with one sexual partner (last 12 months): 27–53%
- Female sex workers (commercial and transactional): 9–46%
- Clients of female sex workers: 9–11%
- Individuals with more than one sexual partner (last 12 months): 1–4%
- Partners of individuals with more than one sexual partner (including partners of clients of female sex workers): 1–4%

Homosexual transmission of HIV—15% of predicted new infections

3.2.3—Research on Most At Risk Populations

Increases in incidence of HIV are being documented across the region among certain "at-risk populations," such as men who have sex with men (MSM). As of yet, Rwandan HIV policy has not addressed HIV prevention among MSM, due largely to a lack of data and due to denial about the existence of sex between men. Homosexuality is not illegal in Rwanda, but is strictly against societal norms, with a strong cultural resistance regarding its existence. Most MSM are not open about their sexuality and lack a community structure. This complicates research endeavors, and calls for a novel approach to recruitment and data collection that prioritizes safety, while raising community awareness of the existence of MSM. To address this gap, the CNLS in collaboration with UNAIDS and MEASURE Evaluation conducted a behavioral surveillance study (BSS) of MSM in Kigali carried out in 2008–2009. The aim of this study was to describe the population of MSM in Kigali and explore the nature of sexual activity between MSM.

The study utilized a snowball sampling strategy involving peer recruiter/s with a double-incentive structure. That is, men completing the questionnaire were asked

to recruit their friends, acquaintances and sexual partners into the study and they received a small incentive for completing the study and for each eligible respondent that they recruited. The questionnaire was interviewer-administered and took approximately one hour to complete. Ninety-eight (98) MSM aged 18 to 52 years, participated in the study. Key results include:

- Ninety-four respondents reported previous anal sex with another man, and 88 reported anal sex with another man in the 12 months prior to survey. Men reported an average of two male sexual partners in the 12 months prior to survey (median; mean=3.4; range: 1 to 36).
- Thirty-seven respondents reported casual sex in the one month prior to survey and 18 of these men reported unprotected sex with a casual sex partner in this timeframe.
- MSM have wide sexual networks. Sex with men whilst travelling outside Kigali was commonly reported. One-quarter of respondents reported sex with a woman in the year prior to survey and one in seven men reported commercial or transactional sex with a woman in the same timeframe.
- Condom use among MSM in Kigali is low. Thirty-four respondents reported that they had never previously used a condom with a male or female sexual partner. Among men reporting sex with another man in the 12 months prior to survey, one-third reported consistent condom use with all male partners. One-third of respondents reporting sex with a female partner in the 12 months prior to survey reported condom use at last sex with a female partner.
- A high proportion of MSM in Kigali may engage in commercial and/or transactional sex: one in ten respondents reported exchanging sex for money in the year prior to survey.
- Twenty-seven respondents reported experiencing at least one STI symptom previously and 13 respondents reported a prior STI diagnosis.

The results of this exploratory study suggest MSM in Kigali are at elevated risk for HIV infection compared to the general population, and require specific HIV/STI prevention services/support (28). Injecting drug use (IDU) appears to be rare in Rwanda; however, a comprehensive study of injecting drug use is yet to be conducted. Action of Evangelical Churches for the Promotion of Health and Development released a project report indicating that although youth are using drugs that impair their judgment and put them at greater risk for contracting HIV, no person has yet indicated that they have engaged in injecting drug use. The First Lady of Rwanda's foundation, Imbuto Foundation, plans to conduct a more detailed study on youth and drug use in 2009, which will include questions about injecting drug use. Results will be available in 2010.

3.2.4—Other Factors Contributing to the Spread of HIV

Research and analyses from various sources point to a number of broader socio-cultural and environmental factors that influence vulnerability to HIV infection, and which therefore inform much of the strategic thinking in the current NSP. The key factors are:

- Marginalization of most at risk populations. Some groups have difficulty accessing HIV prevention and care services that respond to their specific needs, largely because of denial or stigmatization—these include sex workers and men who have sex with men. Legal barriers can also make it difficult to reach these groups. Another group that is often marginalized and underserved by HIV prevention programs is people living with disabilities, which is a large population in Rwanda.
- Linked to the issue of marginalization is the behavior of many healthcare workers, which can put people off accessing services, particularly if they come from stigmatized groups. It is thought that many women fail to access PMTCT because of judgmental attitudes from health care workers towards women who do not have a stable partner.
- Gender inequality is also a major challenge, with women and girls commonly having less power to insist on safer sex, and with norms continuing to favor high rates of partner exchange among men.
- Multiple concurrent partnerships and cross-generational sex often lead to discordant couples, already noted as one of the main groups where new infections occur.
- Conservative attitudes to discussing sexuality are common. Sex outside of marriage, and use of condoms, especially among young people, tend to be looked down upon, making the provision of correct, essential information and services very challenging.
- Violence against women and girls is a significant problem in Rwanda. The experience of violence remains a fact of life ingrained in the experiences of women across Rwanda, most often occurring in

the home. Among women, 31% have experienced violence since the age of 15, most often from a husband or partner. Many women also experienced sexual violence during the genocide in 1994 when HIV was transmitted to countless women through rape. However, the experience of sexual violence did not end in 1994. In the first three months of 2007, of all crimes reported, the crime that outnumbered all others was rape.

- The percentage of adult men who are circumcised in Rwanda is currently 15%, meaning that as in neighboring countries, the population has a higher susceptibility to HIV and some other sexually transmitted infections.
- Program records indicate that people living with HIV rarely receive a comprehensive package of support for "positive" prevention.

3.3—ORGANIZATION OF RWANDA'S RESPONSE TO HIV AND AIDS

3.3.1—Organizational Structure and Leadership in the Response to HIV/AIDS

Rwanda's response to HIV/AIDS was directed by the National Program for the Fight against AIDS (PNLS) from 1987 until 2000, when the government restructured the PNLS into two new organizations known today as CNLS and the TRAC Plus, which is under the supervision of the Ministry of Health (MOH). The CNLS has an Executive Secretariat, responsible for coordinating the National Multi-sectoral HIV/AIDS Strategic Plan. The Secretariat coordinates the national multi-sectoral response to HIV/AIDS with particular focus to key functions such as national policy development, partnerships, monitoring and evaluation.

Rwanda adheres to the "Three Ones" principles: the existence of one national coordinating body, one strategic national plan of action and one national monitoring and evaluation framework. The role of the CNLS as a coordinating body changed in January 2006 when the political structure in Rwanda shifted to a decentralized government at the district level. The goal of this decentralization process was to improve efficiency in service delivery and to empower district authorities to better coordinate and monitor activities, including the HIV/AIDS response, at the district-level. The existing 106 districts and 12 provinces were consolidated into a new administrative structure of five provinces, 30 districts, and 416 sectors. The decentralization process also resulted in each of the 30 districts establishing a District AIDS Control Committee (CDLS) to work in close cooperation with the CNLS (15).

The CDLS is a committee established to support district mayors in managing the HIV/AIDS response while simultaneously coordinating the district-level HIV response across implementing partners. It is formed of representatives of decentralized public services (health, education, planning), of mass organizations (national women and youth councils) and of civil society organizations (PLHIV, NGO, FBO networks as well as people living with disabilities [PWD] in some districts).

Although the CNLS is charged with coordinating the national HIV response, the CDLS ultimately reports their progress and achievements to the mayor of each district. Each committee is comprised of two Technical Assistants, the District Director of Planning, the Director of the District Hospital, the District Director of Education, a representative from the Network for Rwandan People Living with HIV/AIDS (RRP+), a representative from the National Youth Council, a representative from the National Council for Women, and a representative from the NGO forum on HIV/AIDS. Every year, the CDLS facilitate a participatory process to develop an Annual Action Plan for their districts including planned activities, performance indicators, annual targets, and a budget for HIV-related activities that will be implemented over the course of the year.

3.3.2—Implementation

As previously described, the EDPRS provides the framework for multi-sectoral action on HIV/AIDS, and each economic sector's strategic plan includes areas of action on HIV/AIDS. The EDPRS sectors incorporate all actors, including the private sector and communities, with each sector under the leadership of a government Ministry. Within the public sector, the most important sectors other than the Ministry of Health in the response to HIV/AIDS are: Ministry of Finance and Economic Planning (MINECOFIN), Ministry of Education (MINEDUC), Ministry of Foreign Affairs (MINAFET), Ministry of Youth (MINIYOUTH), Ministry of Sports and Culture (MISPOC), Ministry of Gender and Family Promotion (MIGEPROF), and the Ministry of Local Government, Community Development and Social Affairs (MINALOC).

Civil society organizations, mass organizations, and the private sector are also active in the national response

(18). The mass organizations are the National Women's Council and the National Youth Council. There are five umbrella organizations in charge of the coordination of civil society in the response to HIV: ABASIRWA (Media Umbrella); Rwanda NGO Forum on HIV/AIDS; Network of FBOs in the Response to HIV/AIDS (RCLS); Rwanda Network of People Living with HIV/AIDS (RRP+); and Umbrella of People with disabilities in the fight against HIV/AIDS (UPHLS). There is also one umbrella in charge of the coordination of HIV-related activities in the private sector (HIV/AIDS Unit of the Private Sector Federation).

Faith-based organizations provide leadership in implementing home-based care programs. Other activities undertaken by nongovernmental organizations and community-based organizations include voluntary counseling and testing and psychosocial support. The Network of People living with HIV and Forum of NGOs engaged in HIV response have branches in all 30 districts and are leading advocacy programs for the universal access to HIV prevention, treatment, care and support. CSOs contribute more effectively in supporting delivery of antiretroviral therapy and strengthening community- and home-based care programs. The Private Sector Federation in Rwanda leads the private sector response to addressing HIV/AIDS issues in the workplace.

However at present, of the 5,000 enterprises registered with the Private Sector Federation only 30 have implemented HIV-related activities in the workplace. Several nongovernmental organizations contribute to the Cross Border Initiative, which provides prevention and care services for sex workers, truckers and young people living in border and transit areas. Community-level initiatives are numerous, and are primarily focused on sensitizing community members and delivering educational campaigns. FBOs are particularly involved in providing funds for support to people living with HIV and affected families, and many health facilities are run by FBOs. Most national NGOs have integrated HIV education within their programs. International NGOs are also an important component of the national responses, being involved both in direct service delivery and in the provision of technical support for other civil society organizations.

3.3.3—Financing, Development Partners and Technical Cooperation

The main sources of financial support for the response to HIV/AIDS are the government, households themselves, and international partners, such as UN agencies, the African Development Bank (ADB), the World Bank's Multi-sectoral AIDS Project (MAP), the Global Fund, the United States Government (USG) through PEPFAR, and other bilateral donors. The UN system, donor governments and other international partners are also significant contributors to technical assistance for the response to HIV/AIDS.

3.4—ASSESSMENT OF THE RESPONSE TO HIV AND AIDS AND KEY GAPS

3.4.1—Joint Review of the NSP 2005-2009

The joint review of the NSP 2005–2009 (6) was carried out between August-November 2008. The overall goal of the joint review was to assess progress and achievements of the NSP 2005–2009 (16) as well as to make recommendations to reinforce measures for a sustainable multi-sectoral response to HIV/AIDS across the country. The review was carried out under the leadership of the SE-CNLS, and it involved stakeholders from all sectors in the collection and the analysis of data. Using routine data, program reports, discussions with program implementers and with program beneficiaries themselves, the review examined the following areas:

- Progress in implementing the NSP 2005–2009.
- Relevance of the response to the HIV epidemic and relevance and effectiveness of interventions.
- Gaps and areas not adequately addressed, and solutions to remedy these gaps in the forthcoming plan.

Axis I—Reinforce measures of preventing HIV/AIDS transmission

Key achievements and gaps were as follows:

- None of the available data showed strong evidence of increases in HIV prevalence at a national level over the period 2006–2008; however nor do they provide any evidence for decreases in HIV prevalence;
- In terms of behavioral change, data showed both positive and negative changes, with some sources reporting increases in rates of systematic condom use and others indicating an increase in the percentage of young people with more than one sex partner (19);
- A large proportion of the population was reached by basic HIV/AIDS information and HIV testing;

- Access to condoms, HIV testing, and STI treatment was uneven, with some of the most at risk populations reporting the worst levels of access (20);
- On the whole programs failed to systematically target the most at risk groups or the defined "hotspots". This was partly because understanding of the epidemic has evolved since the NSP 2005–2009 was written, but also probably because of barriers to working in some hard-to-reach or marginalized contexts;
- Different components of HIV prevention are often implemented in a fragmented way, meaning that many populations are not receiving a comprehensive "package".

Specific recommendations for HIV prevention efforts from the NSP 2009–2012 included the following:

- Ensure that strategies are evidence-based. Many preventive interventions are limited to provision of basic information on specific behaviors rather than on proven approaches. Achieving safer sexual behaviors requires a range of skills building, community development work, advocacy, and access to services (21).
- Address the causes of stigma. Stigma and denial have played a central role in the spread of HIV. However, stigma and shame are not just attached to HIV, but to sexual activity in general, and also to STIs. Hence, it is difficult to tackle HIV stigma while maintaining judgmental attitudes to sex.
- Provide HIV prevention services and interventions as a comprehensive "package". To be effective, HIV prevention programs need to deliver a "package" of different interventions or services rather than focusing on one intervention. At the implementation level, HIV prevention programs should be designed with this in mind, so that the different interventions and services are interlinked and so that there are strong referral mechanisms: for instance between information, education, communication (IEC)/behavior change communication (BCC) (22) and STI treatment, condom provision and HIV testing services (23). It is also important that strong linkages be made between the HIV prevention "package" and care, treatment and impact mitigation programs so that they are mutually reinforcing.
- Ensure continuity of HIV prevention interventions and services. Many of the interventions and services people need to protect themselves from HIV need to be continuously available—especially condoms (24) and STI treatment. BCC should also be provided in a continuous way as peoples' attitudes and circumstances change over time.
- Ensure that intensive prevention programs primarily reach most at risk groups, while continuing to implement broader strategies for the general population. Although it is important that everyone in Rwanda has equal access to basic information and services such as HIV testing and condoms, there is undoubtedly a case for targeting specific HIV prevention programs to certain groups who are at highest risk. In designing programs aimed at reaching most at risk groups programs should take into account not just the immediate behavioral risk factors, such as high numbers of partners and unsafe sex: they should also take into account issues such as marginalization and stigmatization which may stand in the way of these groups accessing HIV prevention services.

Axis II—National response to HIV/AIDS adapted to Rwanda's conditions and surveillance research results

Key achievements and gaps were as follows:

- Major progress was made in developing new and different data and information dissemination mechanisms and there are several strategies now in place that did not exist in 2005 (25). The two annual research conferences give a national platform for information dissemination and regroup all of the major HIV stakeholders to exchange results, best practices, and lessons learned. The development of an HIV/AIDS Digital Library and a physical Documentation Center are two other examples. However there are still gaps in the routine analysis and dissemination of data. For example, the data from the Health Information System (HIS) are not analyzed or disseminated. Partners who do have available information often do not provide it in a timely manner. Despite the national-level activities put in place for data and information dissemination, districts report limited access to information and very rarely, if ever, use the information available to inform planning and decision making;
- A major achievement was the development of an HIV/AIDS Research Committee to assist in the coordination of national and international HIV

research. This mechanism to coordinate research and promote a better exchange among researchers nationally is a large achievement over the course of the plan. The Research Committee on HIV/AIDS continues to face a number of challenges. There is no mechanism in place to collect or disseminate the results of research protocols that have been approved by the committee, and to date there is no defined national research agenda;
- Perhaps the largest constraint was the general lack of strategy for building capacity in research, surveillance and data use, both for technicians and non-technicians. A number of activities were completed in an isolated manner and there were some results to report, but this was an overall major gap;
- There is no mechanism in place to coordinate behavioral surveillance activities being conducted by different actors. In addition, there is no prioritized list of potential at-risk populations that should be tracked through surveillance. The original NSP listed over 15 potential at-risk groups without defining priorities within the list. These groups should have been prioritized and subsequently tracked over the review period, whether through direct national-level efforts or the coordination of NGO behavioral surveillance activities.

Specific recommendations for HIV surveillance, research and use of data in the NSP 2009–2012 included the following:

- *Data Dissemination*: Develop better mechanisms for analyzing data at the national level and disseminating them to districts; conduct data analysis and develop dissemination mechanisms for the data from the SIS, the syphilis data collected during sentinel surveillance and the VCT data routinely collected from health facilities each month; better implication of the Documentation Center and HIV/AIDS Digital Library as mechanisms for data dissemination.
- *Capacity Building*: Increase the capacity and scope of NISR's planning and data analysis program; recruit, for every health center, a data management officer for data collection, analysis and dissemination of routine health statistics from their catchment area including SIS data and case notification system; build capacity of CDLS in accessing and using data for decision making and planning; increased participation of CDLS in partner activity planning to better use of data specific to their region.
- *Behavioral Surveillance*: Re-evaluate behavioral surveillance activities given new data and modeling; Better coordination of behavioral surveillance activities; better define the periodicity of behavioral surveillance activities; Redefine targets of behavioral surveillance activities to ensure newly identified MARPs are covered and to enhance definition of populations.
- *Research Committee*: Review the role of the Research Committee in developing and coordinating a national research agenda with MOH, School of Public Health, TRAC+ and other research partners; Develop a mechanism for collecting the results of approved research and disseminating these results in a regular manner; Develop strategies to increase the participation of members of Research Committee; Research Committee should play a larger role in building capacity of researchers.

Axis III—Improve treatment, care and support for persons infected and affected by HIV/AIDS

Key achievements and gaps were as follows:

- The proportion of patients in need enrolled into an ARV program increased from 35% in 2005 to 76% in 2008. The number of patients lost to follow stayed about constant: 5% in 2005 and 7% in August 2008. Moreover there was significant reduction in the real cost of accessing ARV services by PLWHA with the introduction of Mutuelles de Santé covering for ARV treatment. Opportunistic Infection treatment was included into other services packages offered by community based health insurance. However, a significant gap was that pediatric care was not sufficiently reinforced;
- There was an increase in percentage of facilities offering ARV services from 23% to 43% (Dec. 2008); however there was insufficient training for health personnel on existing guidelines in HIV/AIDS care (including pediatric care);
- There was significant improvement in the collaboration between health facility and community based agents to facilitate clients, and community-based care organizations improved HIV/AIDS service delivery compared to the 2005 situation. However, community-based care is still problematic: partners do not provide the same package of services, therefore the

extent of coverage is not easy to know. Only one organization is providing community-based treatment (in one district).

Specific recommendations for care and treatment of people living with HIV included the following (26):

- Develop targets and clear strategies to achieve outcome/output of the next NSP.
- Harmonize package and monitor the partners to implement national nutritional guidelines; adherence support; and community care and support.
- Adopt task shifting to solve problems of shortage of human resource.
- Develop a strategy to enroll and retain health personnel in the HIV/AIDS field.
- Reinforce pediatric care provision.
- Develop guideline and train guidelines users, particularly for the community based care interventions and for pediatric care.

Axis IV—Mitigating the socio-economic impact due to HIV/AIDS

Key achievements and gaps were as follows:

- In spite of the enormous needs for economic support in a country where 57% of the population is under the level of poverty, the income generation activities (IGA) funded through the micro project mechanisms of various projects (MAP, GF, CHAMP, CNLS/UNDP/ADB) have helped a large number of HIV positive member associations to initiate or strengthen collective projects that have had profound effects on their livelihoods, more so in terms of decreased stigmatization and social isolation than in terms of economic status per se. The majority of beneficiaries of these IGA are women, reflecting their participation in associations where they represent about 70% of all members. However this may mean that men with HIV are left vulnerable. The substantial support to OVCs for access to education is also a major achievement of the last few years and will help to decrease the vulnerability of these children and youths. However, there are gaps in support for management and technical assistance to IGAs, as well as in access to credit. The complex procedures involved in transforming associations into cooperatives have distracted attention from core business, and knowledge of how to organize and manage co-operatives is limited. Limited analysis of markets and opportunities has also meant some IGAs have failed;
- Important steps have been made in the establishment of an enabling environment for legal and policy framework for the protection of rights of people living with HIV/AIDS and OVCs and for prevention and prosecution of sexual violence. Access to numerous services for vulnerable groups has also significantly improved during this period: access to health services (Mutuelles de Santé), education, social protection and legal services through various projects. However there are also gaps. There are few workplace programs for HIV prevention and access to care and treatment for employees, lack of coordination of different services (health, social, police, legal assistance) and limited access to legal protection. Identification of OVC at district level has suffered from a lack of transparency and consistent application of criteria, meaning that support does not always reach all of those in need;
- RRP+ has considerably strengthened its coordination mechanisms during the period of the NSP with the setting up of district coordinators in half of the districts and the strengthening of its central staff for coordination and M&E purposes. The delegation of representation from the grassroots level to the national level ensures the participation of local communities in the planning, implementation and evaluation of activities concerning HIV/AIDS. The transformation of the associations into cooperatives is also a mechanism to ensure fuller participation of members into the decision-making process of the organization: well established rules for the functioning of the cooperatives describe clearly the transparency and inclusiveness that must be respected in distribution of profits from the organization's activities and in decisions about the management of these activities.

Specific recommendations for mitigation of the socio-economic impact of HIV included the following:

- *Income generation*: The review recommends the focus on production activities that respond to the market needs and on cooperatives' capacity building to identify and assess market opportunities; and to develop businesses. Funding and access to credit for viable IGAs needs to be increased, but only alongside the promotion

of better market analysis and linkages and business planning. Credit guarantee schemes, as well as other capitalization approaches should be considered. Increased capacity on project design and management, leadership, financial management and cooperative organization are prerequisites for effective economic programs.

- *Cooperatives*: There is a need to clarify the regulation on formation of cooperatives in order to ensure that it responds to the vulnerable people's needs and to support partners in their organizational capacity building and improvement of their business performances. Skills in identifying and evaluating market opportunities need to be developed in co-operatives.
- *Support to orphans and vulnerable children*: Support is required to improve the dissemination of criteria for OVC identification and to increase transparency in how criteria are applied at the district level. At the same time, efforts are required to scale up the numbers reached by essential support and to ensure that in each case the minimum service package is provided. Particular attention should be paid to facilitating access to secondary studies for children heading households.
- *Legal protection*: Understanding of rights is a gap, and emphasis should be placed on ensuring that vulnerable people know their rights. It is also important to provide legal support and to enhance the collaboration system between health service providers, local authorities and the police.

Axis V—Planning and coordination of the response to HIV/AIDS

Specific recommendations on planning and coordination (27):

- *Sectors*: Ensure adequate resource allocation for an effective participation of all sectors in the multi sectoral HIV response according to EDPRS, sector strategic plans and annual work plans.
- *Umbrellas*: Strengthening of central structures and especially decentralized structures. Ensure sustainable mechanisms for adequate resources (human and financial) to coordinate and represent civil society organizations.
- *Districts*: Strengthen capacity of CDLS to coordinate all partners within the district and take an active role in fund allocation decision making.
- *Capacity building*: Develop a national capacity building plan to which all partners will contribute in a coordinated manner.
- *Partnership*: Improve involvement of international donors and implementing NGOs in planning and coordination processes. Ensure that international partners' interventions correspond to priorities identified at the national and district level.
- *Regional*: Strengthen regional coordination mechanisms to harmonize cross border aspects of HIV response.

3.4.2—Rwanda Service Provision Assessment Survey, 2007 (adapted from the SPA report)

Background to the RSPA 2007: The Rwanda Service Provision Assessment 2007 (RSPA 2007) (17) was conducted in health facilities to evaluate the provision of health services. The results shed light on several aspects of problems faced by reproductive health services regarding provider performance, equipment and supplies in facilities and laboratories, availability of medicine, initial staff qualification and in-service training, and supervision of health care providers. The summary of results provided here, adapted from the Executive Summary of the SPA report, illustrates the extent to which health systems strengthening efforts are essential to achieving the impact on HIV/AIDS that this NSP aspires to. Particular weaknesses are found in aspects of ante-natal and post-natal care that are important to preventing mother-to-child transmission of HIV; and the provision of sexual and reproductive health services including correct diagnosis and treatment of STIs; and youth-friendly services.

The RSPA was a national representative survey conducted in 538 health facilities throughout Rwanda, covering hospitals, health centers, dispensaries and health posts, including all public facilities such as government and government-assisted health facilities. The objective was to assess the strengths and weaknesses of the infrastructure and systems supporting these services, and to assess the adherence to standards in the delivery of services. The RSPA was undertaken by the National Institute of Statistics (NIS) of the Ministry of Finance and Economic Planning and the Ministry of Health, with technical assistance and funding provided through Macro International Inc. under the MEASURE DHS project. USAID provided financial support for the survey.

Facility-level infrastructure, resources, and systems: A full package of basic services (outpatient care for sick children and for adult STIs, temporary methods of family planning, antenatal care, immunization, and child growth monitoring) is available in 44 percent of

health facilities. Facility-based, 24-hour delivery services are available in almost all hospitals and in 9 out of 10 health centers. About 6 out of 10 facilities have all the basic amenities to ensure client comfort; approximately one-third have a regular year-round water supply, and 63 percent have regular electricity or a generator. All client comfort amenities, which includes working toilet, waiting area, basic level of cleanliness with year-round water supply and regular electricity, are available in about 1 out of 10 facilities.

Almost all facilities routinely charge some form of user fees for adult curative services. Most charge for medicines, client consultations, laboratory tests, and records, while smaller proportions charge for client registration. About one-third of facilities that store vaccines, contraceptives, and medicines have an adequate system to monitor the stocks of these items; while nearly half of facilities that store ARVs have an adequate system. Expired vaccines, contraceptives and medicines are not commonly found in facilities. However, stock-outs are a common problem.

Eight in ten facilities have functioning equipment (or chemicals for sterilization) for the processing method used. Boiling or steaming is the most commonly used method for processing equipment. For this method, one-third of facilities have functioning equipment and staff with knowledge of the correct processing time. Adequate disposal systems for hazardous waste were commonly observed: approximately nine out of 10 facilities have an adequate final disposal system for infectious waste, and about the same proportion do so for sharps waste.

Family Planning Services: Approximately three-quarters of health facilities in Rwanda offer some temporary modern method of family planning, and about two-thirds offer these methods five or more days per week. The most widely available temporary methods are combined or progesterone-only oral contraceptive pills, progestin-only injectables, and male condoms. The majority of facilities offering the most popular methods had them available on the day of the survey. However, in Kigali City, where HIV prevalence is high, only two-thirds of facilities had male condoms available on the day of the survey.

Guidelines and protocols for family planning are not widely available. Items for infection control are available in the family planning service area in less than one-third of facilities, with soap and running water being the items most commonly lacking. Only 14 percent of facilities (mostly hospitals) have the capacity to properly process reusable family planning equipment. Up-to-date family planning client registers are available in about nine out of 10 facilities, mostly in government and government-assisted facilities. While only one-fourth of family planning facilities meet criteria for routine staff development or training for family planning providers, 94 percent of them meet criteria for routine staff supervision.

Few issues are considered big problems by family planning clients, and even then only by a small proportion of clients. Waiting time to see a provider is the issue they are most likely to consider a big problem. Family planning clients usually visit the facility closest to their home. Lack of medicines is one of the main reasons clients give for not going to the closest facility.

Maternal Health Services: ANC services are available in four out of five facilities nationwide and in about 9 out of 10 facilities in the North, South, and West provinces. Availability of ANC services is lowest in Kigali City, where ANC is available in only half the facilities. All three services (ANC, postpartum care, and tetanus toxoid vaccine) are available in only one out of seven facilities; this is because postpartum care is not widely available in Rwanda. TT vaccination is offered in about four out of five facilities, and on most but not all days that ANC services are offered.

Items that support quality ANC counseling (visual aids, ANC guidelines, and individual client cards) are not available in most facilities offering ANC services. The ANC package and items for infection control are each available in one-third of health facilities offering ANC services. While most facilities have up-to-date ANC registers, only six percent have postpartum care registers. More than half of facilities have documentation indicating that they monitor ANC coverage rates. About three-fourths of all facilities offer normal delivery services. These services are far less available in facilities in Kigali City than in the provinces. Caesarean sections are generally done in hospitals. Two-fifths of all facilities have a system of emergency transportation to another facility for maternity emergencies.

Only three out of five facilities that offer normal delivery services have all infection control items at the service site. The items most commonly missing are

soap and running water. Only one out of five facilities that offer normal delivery services have all the elements needed to support quality sterilization of delivery equipment, and only eight percent have written guidelines for sterilization or disinfection processing available in the area where delivery equipment is processed. Basic equipment and supplies for conducting normal deliveries (such as scissors or blades, cord clamps or ties, and a disinfectant) are generally available in the facilities offering delivery services, with hospitals more likely to have all basic supplies than other types of facilities.

Additional medicines and supplies for managing serious complications are available in only one-third of facilities offering delivery services. Almost all hospitals offering delivery services provide blood transfusion and caesarean section services. These services are most widely available in facilities in Kigali City. Among facilities that perform caesarean sections, about four out of five have all of the needed equipment, including an operating table, operating light, scrub area adjacent to the operating room, and sterilized instruments. About eight out of ten hospitals have the essential equipment and supplies (or the capacity) for managing the complications of labor and delivery such as assisted vaginal delivery and post-abortion care.

Services for reproductive tract infections, sexually transmitted infections, and tuberculosis: STI services are offered in almost all health facilities as part of general outpatient curative services. About one out of five facilities integrate STI services into ANC and family planning services as well as general curative care. Specialized STI services are rare, and infrequently observed in dispensaries, clinics, or health posts. Only one out of five facilities have everything needed to support quality STI counseling. Almost all facilities provide STI counseling under conditions that ensure both visual and auditory privacy, and STI guidelines, visual aids, and educational materials for STIs are available in six out of ten service delivery areas. Fifteen percent of facilities providing STI services do not have condoms available, either in the service delivery area or somewhere else in the facility.

One out of ten facilities offering STI services has all items needed for physical examinations. Rarely do facilities have everything needed for both infection control and quality physical examinations for STIs. About half the facilities that reported having the capacity to test for HIV/AIDS (29 percent for syphilis) had the test materials available on the day of the survey. Only 18 percent of facilities reporting the capacity to test for gonorrhea had test materials available. About three-quarters of facilities had at least one medicine available for each of the four common STIs.

Almost two-thirds of facilities, mostly hospitals and health centers, offer TB services of some kind, including diagnosis, treatment, and follow-up. Three out of five facilities provide TB treatment and/or follow up, and 85 percent of facilities follow the DOTS approach. Of facilities following the DOTS approach, nine out of ten have all first-line treatment medicines available. Eighty-five percent of facilities routinely refer newly diagnosed TB patients for HIV testing and three-fourths have records of such referrals available.

HIV/AIDS Services: Sixty-two percent of all facilities in Rwanda have an HIV testing system. This includes almost all hospitals and nearly seven out of 10 health centers. An informed consent policy for HIV testing is also available in sevenn out of ten facilities with an HIV testing system. More than half of all facilities provide care and support services for HIV/AIDS clients.

TB diagnosis and/or treatment services are available in about two-thirds of facilities that offer HIV/AIDS services, and over half of these follow the DOTS treatment approach. STI treatment services are available in almost all facilities that offer care and support services for HIV/AIDS clients. The items to support STI services that are most often missing are STI treatment guidelines in all relevant service sites. Malaria treatment services are available in nearly all facilities that offer care and support services for HIV/AIDS clients. While antimalaria medicines are widely available in these facilities, fewer than six out of ten of them have malaria treatment guidelines.

Almost all facilities that offer clinical care and support for HIV/AIDS clients have medicines for treating pneumonia and other bacterial infections, and nine out of ten facilities have medicines for basic pain management and de-worming. Laboratory testing capacity for monitoring HIV/AIDS clients is generally low among facilities offering clinical care and support. The most widely used spinal tap kit is available in slightly more than half of facilities. With the exception of bacterial culture and India ink, which are available in less than one out of ten facilities, other tests are available in 25 to 44 percent of facilities.

Only about one-third of all facilities, including nice out of ten hospitals, prescribe ART. Items to support ART services are not widely available in facilities: about three out of five ART facilities have the national guidelines for clinical management of ART, almost seven out of ten have the laboratory capacity to monitor ART, but only one-fourth had uninterrupted stock for ARVs in the past six months. PMTCT services are available in about half of all facilities, including about two-thirds of hospitals, health centers, and polyclinics. Two-thirds of PMTCT facilities offer all four of the basic components. Eighty three percent of the facilities have a staff member who received PMTCT-related training in the three years preceding the survey. Post-exposure prophylaxis (PEP) services are accessible in about one-fourth of facilities, mostly hospitals (95 percent). PEP is most accessible in government-assisted facilities, where 44 percent either offer or have a referral system for PEP services. Only seven out of 334 facilities with an HIV testing system offer youth-friendly services (YFS) for HIV testing. While four of the seven facilities that provide YFS have at least one provider trained in YFS services, YFS guidelines and policies were available in only two of the seven facilities.

PART
2

Results and Strategic Framework

1. OVERVIEW OF KEY RESULTS IN THE NSP

Reflecting a commitment to achieving an impact within the population, the NSP 2009–2012 is built around achieving three overarching impact-level results:

1. The incidence of HIV in the general population is halved by 2012.
2. Morbidity and mortality among people living with HIV are significantly reduced.
3. People infected and affected by HIV have the same opportunities as the general population.

A combination of intermediate results, strategies, and actions will ensure that each of these results is achieved. The impact-level indicators and targets for these three results are shown in Table 1. Two cross-cutting strategies underpin the NSP:

1. Strengthening central and decentralized coordination of the response to HIV/AIDS
2. Ensuring effective monitoring and evaluation of the response to HIV/AIDS

These cross-cutting strategies, described in Part 3 and Part 4, will ensure that the necessary conditions for an effective response are in place. They include all of the required systems for planning, coordinating, monitoring and evaluating the response to HIV/AIDS.
Section 2 describes the overarching principles that inform the NSP. Section 3 summarizes the strategies that have been selected to achieve each output, intermediate outcome, outcome and ultimately each overarching result. Further details on the strategies and activities are provided in the annexed detailed logical framework.

Table 1—Indicators for Measuring Impact of the NSP with Respective Baselines and Targets

Result number	Indicator	Baseline	Target by 2012
1	HIV prevalence in the population aged 15-24 (disaggregated by sex, age and urban/rural)	RDHS 2005: 1.0%	0.5%
2	Percentage of adults and children with HIV known to be on treatment 12, 24 and 36 months after initiation of antiretroviral therapy	National ART Evaluation 2004-2005: 91% at 12 months Baseline for 24 and 36 months by 2011	>90% for 12 months
3	Percentage of people living with HIV/AIDS in poverty is not more than the general population	Baseline by 2010	No more than 46%

2. Overarching Principles for the National Response to HIV/AIDS

2.1—EQUITY AND HUMAN RIGHTS

2.1.1—Geographical and Financial Access to Health Care Services

As described earlier, the Health Sector Strategic Plan (4) aims to give all Rwandans access to comprehensive health services within a 3.5 km distance of their home. Accordingly, the NSP also aims to ensure that HIV services are accessible. Although the network of health facilities is already well developed, there are still isolated areas where people have to walk long distances to reach a health center, and not all health centers are yet providing a complete array of HIV services. The plan aims to ensure that all existing health centers are able to provide HIV testing and PMTCT services, as well as STI treatment services, and care and treatment for people living with HIV including nutritional support and psychosocial support. As the health service network is completed, all HIV services will also be progressively introduced.

Financial access to HIV services is ensured through the community based insurance scheme, Mutuelles de santé. Not all services are covered by Mutuelles, and additional expenses such as transport and food are not included. By supporting Mutuelles membership for specific marginalized and vulnerable groups and for people infected and affected by HIV, this NSP will contribute to the Ministry of Health's aim of ensuring universal coverage of this community-based insurance so that all Rwandans are entitled to receive HIV services, whatever their socio-economic status.

2.1.2—Equity for Marginalized Groups

As outlined in the situation analysis, the marginalization of various groups stands in the way of effective HIV/AIDS programs. Social exclusion can affect the access of marginalized groups to health services as well as the quality of those services:

- People may refrain from using services because they fear that they will be judged by service providers.
- In some cases services are not adapted to the needs of some groups, for example people with visual impairments do not have access to educational materials designed for the general population and those with hearing impairments cannot use regular counseling services; physical access to facilities can also be problematic.
- For other groups services are not even available, for example availability of condoms in prisons is limited because prison authorities deny the existence of sexual intercourse between inmates.
- Some groups require specially adapted services that respond to their needs, for instance sex workers, men who have sex with men and people with disabilities. Very few such services are currently available.

These barriers originate at different levels: the attitudes of service providers and community based organizations toward marginalized groups; the capacity of service providers and community based organizations to respond to the specific needs of these groups; and the existence of barriers within policy and legislative frameworks that mean the rights of these groups are not protected. In order to address these issues the NSP introduces capacity building measures as well as specific interventions adapted to the needs of those groups.

Particular attention needs to be given to the training of health care providers to ensure that people who belong to marginalized groups receive adequate care, regardless of the prejudices service providers may have towards them. Policy analysis and advocacy activities will also be conducted where necessary. Underpinning all of these strategies is a commitment to ensuring greater participation of members of these groups in assessing their needs, designing programs, and advocating for necessary changes in the environment.

2.1.3—Greater Involvement of People Living with HIV/AIDS (GIPA)

The Rwanda network of people living with HIV (RRP+) was created in 2003. Since then it has expanded from a small group of people based in Kigali into a network of more than 1,361 associations and cooperatives of people living with HIV. At the national level representatives from RRP+ sit on the Board of the CNLS and on the Country Coordinating Mechanism (CCM). They also belong to many Technical Working

Groups on HIV/AIDS (OVCs, Nutrition, Youth, etc.) and steering committees such as the steering committee on health protocols. At the district level they sit on the AIDS Control committees (CDLS) of all 30 districts. As a result of this high level of involvement of people living with HIV in decision-making bodies at both central and decentralized levels, their needs are taken into consideration in the planning of interventions and development of HIV-related policies. Some progress still needs to be made to ensure that PLHIV can influence the development and the enforcement of the legal framework so that their rights are fully promoted and respected. This is why it is planned in the NSP that a review of the existing laws will be conducted. The institutional strengthening of RRP+ and of its member organizations is also one of the strategies included in the NSP in order to enhance GIPA.

2.1.4—Gender Equity

Gender equity is a cross-cutting issue for development policies in Rwanda in general, and it is integrated as such in the EDPRS. It has particular importance and relevance in matters related to HIV. Since this disease is so closely linked to relationships between men and women, and since women are disproportionately affected, special emphasis has to be given to the integration of this principle within the HIV response. This is particularly relevant for the issue of gender-based violence, that of the ability to negotiate the use of condoms during sexual intercourse or to decide on the issue of family planning.

Empowerment of women is an essential condition to make progress on all these questions. In order to make appropriate decisions in the implementation of interventions touching these issues, it is also important to have access to data disaggregated by age and by sex. Although access to treatment appears to be fairly distributed between men and women, it is also important to document access to other services to ensure there is no sexual discrimination in service provision between men and women. Gender norms do not only impact negatively on women. There is evidence that men living with HIV fail to obtain the same level of support as women, and men are far less likely than women to be members of associations of people living with HIV. Strict gender norms are also the origin of stigmatizing attitudes to sexual minorities, such as men who have sex with men. Programs will address the range of impacts that gender inequality can have.

2.2—EVIDENCE-BASED PLANNING AND RESPONSE

2.2.1—Evidence-Based Prioritization: Know Your Epidemic

Identification of the main drivers of the epidemic, the population groups that are most affected as well as those that represent the highest proportions of new infections is a necessary step to prioritizing the groups that should be targeted in the preventive interventions against HIV/AIDS. The situation analysis in Section 1 outlines how this plan has been informed by various analytical exercises. This approach will continue to be a feature of the national response, with new data and analyses being used to update the strategy over time. This will be done through analysis of data gathered through:

1. Regular surveillance of specific groups (in particular pregnant women attending antenatal consultations, young people, sex workers, and men who have sex with men in).
2. Population surveys covering either the general population (DHS) or specific groups (BSS).
3. Other research projects studying certain target groups to improve knowledge of the population size of these groups and their sexual behaviors.
4. Data emerging from specific projects implemented in Rwanda.

2.2.2—Evidence-Based Response: Know Your Response

Another important aspect of an evidence-based approach is to study the implementation process and the results of different interventions to document their efficiency and to disseminate best practices. This will be done at the national level and also at the international level, learning from experiences in other countries that may face similar situations. National strategies and interventions will continue to be planned and updated according to emerging knowledge.

2.2.3—Quality Assurance

Once interventions have been planned, and protocols are designed to guide the implementers, there needs to be a system to monitor the way the interventions are conducted, whether they are implemented according to protocol and quality criteria. This will be done through supervision during which quality of services will be assessed by verification of medical records and registries, activity reports and direct dialogue and observation of service providers.

2.3—INTEGRATED, COMPREHENSIVE APPROACHES

2.3.1—Integation of Different Components of the Response to HIV/AIDS

Just as different aspects of care and treatment need to be brought together to provide a comprehensive package of services, preventive services also need to be comprehensive, rather than planned as separate and one-off interventions. Different strategies have to be combined to ensure overall effectiveness. "Only" approaches, which promote a single strategy to solve a problem, have been shown to be ineffective. An array of methods has to be proposed to targeted populations to respond to varying individual needs within each group.

This applies to communication methods (mass media, audio-visual and written; health facility driven and community-based through community health workers and community-based organizations), skills for adopting preventive behaviors, and the provision of outreach or facility-based interventions such as counseling and other clinical services. A comprehensive prevention package will be available to all groups of society, adapted to the needs and the specificities of different groups.

Preventive and curative interventions will be implemented in a "joined-up" way rather than being designed and implemented as separate service packages. They will be aimed at the same groups of people, and will benefit from being provided simultaneously: HIV+ patients who are coming for medical follow-up can benefit from prevention support, preventive messages can also be given to the general population when people are coming to health facilities for medical care, and specific target groups can also receive simultaneously preventive and curative services to increase the global benefit from these interventions. Similarly, condoms will be made available both within facilities and in communities.

2.3.2—Integration with Broader Health Programs

It is well established also that both HIV and general health services can benefit from integration: PMTCT and ANC infant HIV follow-up and immunization programs, condom distribution and family planning, VCT and adolescent reproductive health services, ART and nutritional and psychosocial support. Such integration will be systematically promoted and implemented to improve service efficiency and appropriate staff training will be organized for this purpose.

2.3.3—Integration and "Linking" Different Modes of Service Delivery

Many interventions described in this new HIV strategy have both a clinical health facility based aspect and a community based aspect. Rather than seeing them as separate interventions, the strategy adopted by this NSP is to link them to ensure a continuum of intervention. This has numerous advantages, including reducing the risk of loss to follow-up, improving the efficiency of preventive messages because of concordant/complementary messages between health care workers and community based organizations, enhancement of compliance and regularity of treatment, and optimized support to vulnerable and marginalized people who don't have access to the services they need and are entitled to.

A new national policy on community health care has recently been drawn-up, giving a clear definition of the roles of CHWs and of the coordination mechanisms between them and health care workers at the health facility level. Best practices in terms of linkages between health facilities, CHWs and CSOs have been documented and serve as a starting point to develop a model of coordination between the different categories of service providers. A social worker based in each health centre will have the mandate to support and supervise the CHWs working in the health centre's area. Also, the participation of the community's representatives in the health centre committee will be strengthened by training the members of this committee on their respective roles and responsibilities and on health management, and giving them a voice in health outreach.

Another important strategy is to establish a coordination mechanism between the community mobilization system implemented by community based organizations (associations of people living with HIV/AIDS, NGOs, faith based organizations) and the community health workers' interventions supervised by the health centre. To facilitate these interactions between the two systems, regular working sessions will be held between the CDLS and District Health Supervision Team on one hand, and between the local community organizations and the community health workers. These regular interactions will permit better integration between the health services provided at the health centre and the community involvement enhanced by the CHW and the local associations. Improved communication between the health care system and community actors will increase the sense of ownership of the population on the health care services and its utilization of these services.

3. STRATEGIES FOR ACHIEVING IMPACT

3.1—IMPACT 1: THE INCIDENCE OF HIV IN THE GENERAL POPULATION IS HALVED BY 2012

This result is consistent with the EDPRS. Because of the difficulty in measuring HIV incidence at the population level, the indicator that will be used to gauge progress in relation to this result is an accepted proxy for incidence in the general population: HIV prevalence in the population aged 15-24. The target for this indicator is 0.5% by 2012. This will be achieved through the following three outcomes, related to each of the three modes of transmission of HIV:

- Outcome 1.1—Reduction of sexual transmission of HIV
- Outcome 1.2—Reduction of vertical (mother-to-child) transmission of HIV
- Outcome 1.3—Maintenance of low levels of blood-borne transmission of HIV

This structure reflects the emphasis on results rather than on modes of service delivery or preventive methods because a combination of different services (including clinical and non-clinical) and methods is required to achieve results in each case. The overall strategic framework for this result is shown in Figure 7 on the next page.

3.1.1—Outcome 1.1: Reduction of Sexual Transmission of HIV

Epidemic monitoring and modeling suggest that sexual transmission is responsible for the majority of new HIV infections in Rwanda. Three intermediate outcomes will contribute to reduced sexual transmission: reduction of risky sexual intercourse; reduction of susceptibility to infection through increased male circumcision; and reduction of susceptibility to infection through increased correct treatment of STIs. Progress in achieving Outcome 1.1 will be tracked by the indicators shown in Table 2.

The approach for achieving this outcome represents a number of significant shifts in Rwanda's strategy for preventing new HIV infections through sexual transmission:

- As well as redefining the priority target groups and most-at-risk populations based on the most up to date epidemiological information, strategies are tailored to the specific needs of different population groups.
- The strategies place a particular emphasis on the participation of the different population groups in identifying the main factors placing them at risk, and in defining the most appropriate community responses.
- Strategies have been defined so as to ensure that HIV prevention programs are comprehensive, with the different components (such as education, communication, skills building, clinical service provision, access to commodities, and sexual and reproductive health) effectively "linked up" rather than being delivered in a fragmented or vertical manner.

3.1.2—Intermediate Outcome 1.1.1: Reduction of Risky Sexual Intercourse

The interventions under this intermediate outcome are designed to support individuals and communities to

Table 2—Indicators and Targets for Outcome 1.1: Reduction of Sexual Transmission of HIV

Number	Indicator	Baseline	Target by 2012
1.1a	Percentage of most-at-risk populations (female sex workers, truck drivers, men who have sex with men, prisoners) who are HIV-infected	FSW: baseline 2009 Truck drivers: baseline 2009 MSM: baseline by 2010 Prisoners: baseline by 2010	Prevalence remains stable at baseline levels (reduction in incidence and AIDS-related mortality)
1.1b	Percent of discordant couples that remain discordant after enrolment to couples' counseling and testing at 12, 24, 36 months	Baseline by 2009	90% at 36 months

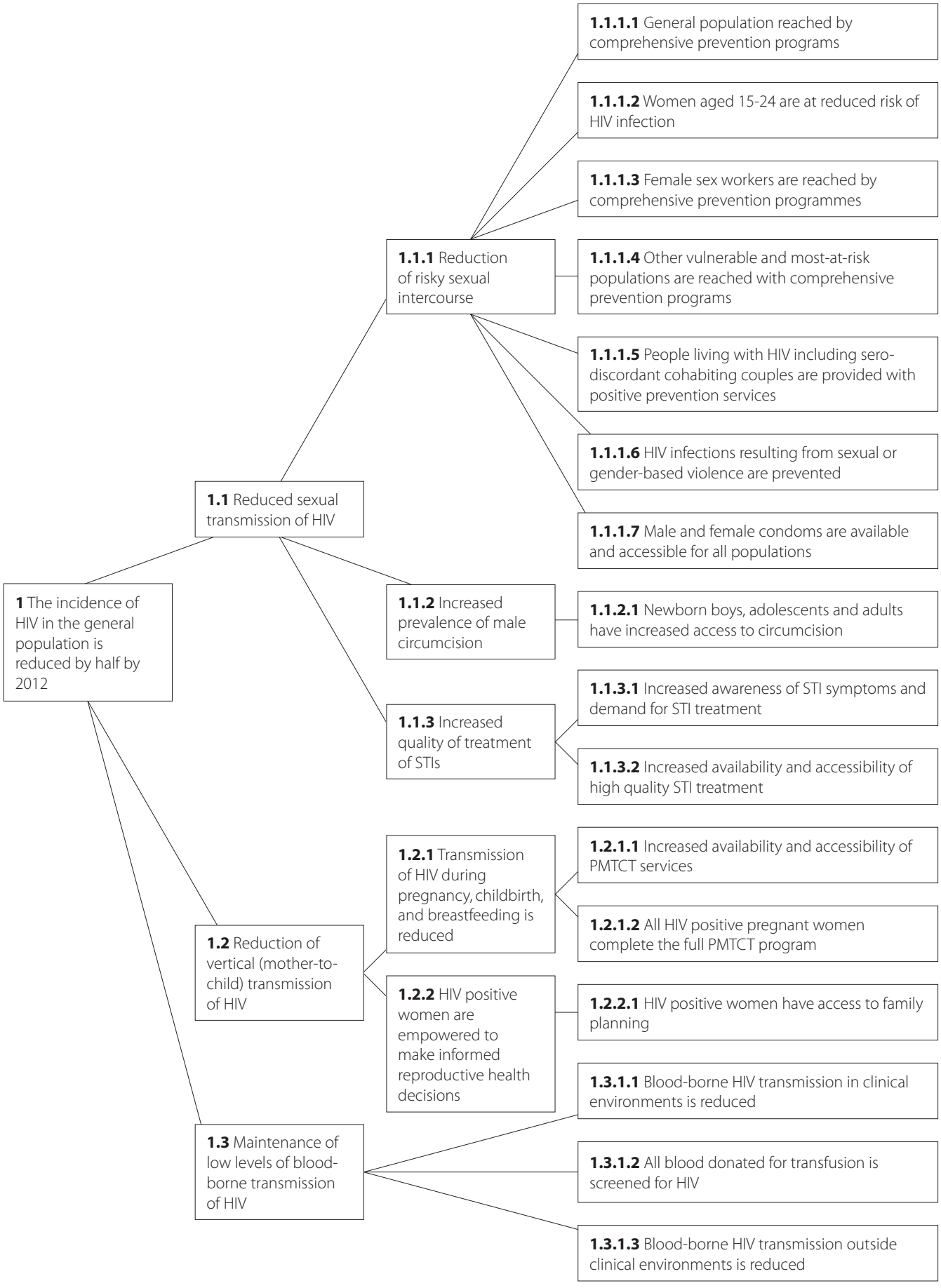

Figure 7—Prevention strategic framework: impact, outcomes, intermediate outcomes and outputs.

protect themselves from becoming infected with HIV. Risky sex is not solely determined by an individual's knowledge and skills, so in order to achieve this result programs will intervene not only at the individual level but will also help address relevant community and structural factors. The epidemiological analyses carried out in preparation for the development of this strategic plan showed that it is likely that a large proportion of new HIV infections occur in three populations: sex workers, discordant couples, and young women aged 19-24. Each of these populations has a number of specific vulnerability factors that need to be addressed through targeted interventions to reduce HIV infection.

Many other groups have been identified as being at risk for HIV infection because of their behaviors or situations (for instance men who have sex with men, mobile populations, prisoners, and people with disabilities), and although these groups do not account for as high a proportion of new HIV infections, it is still important that they are reached by prevention programs. At the same time, strategies are also included to ensure that the entire population has comprehensive knowledge on HIV/AIDS and has access to a basic prevention "package". Many of the interventions will contribute not only to stemming the spread of HIV, but also to improving life skills in general and sexual and reproductive health in particular—not only are these important ends in themselves, but they are also known to be good entry points for HIV prevention efforts. Progress in achieving Intermediate Outcome 1.1.1 will be tracked by the indicators shown in Table 3.

Strategies are organized under seven outputs. The first five outputs incorporate actions aimed at reducing risky sexual behavior within the different population groups

Table 3—Indicators and Targets for Intermediate Outcome 1.1.1: Reduction of Risky Sexual Intercourse

Number	Indicator	Baseline	Target by 2012
1.1.1a	Percentage of women and men aged 15-49 who reported using a condom the last time they had high risk sexual intercourse (non-married non-cohabitating partner) (disaggregated by age and sex)	RDHS 2005: 26.0% in women 15-24 39.5% in men 15-24 19.7% in women 15-49 40.9% in men 15-49	60% in women 15-24 and 15-49 75% in men 15-24 and 15-49
1.1.1b	Percentage of young women and men aged 15-24, and 18-24, who have had sexual intercourse before the age of 15, and 18, respectively	RDHS 2005: 3.9% in women 15-24 13.2% in men 15-24 17.6% in women 18-24 27.2% in men 18-24	12% in women 18-24 18% in men 18-24
1.1.1c	Percentage of population aged 15-49 who had more than one sexual partner in the past 12 months (disaggregated by age and sex)	RDHS 2005: 0.6% in women 15-49 5.1% in men 15-49	Stabilize at <5%
1.1.1d	Percentage of sero-discordant cohabiting couples reporting consistent and correct condom use during reporting period	Baseline by 2009	50% increase from baseline
1.1.1e	Percentage of men reporting the use of a condom the last time they had anal sex with a male partner	Baseline by 2009	50% increase from baseline
1.1.1f	Percentage of female sex workers reporting condom use during last sex with a client	BSS 2006: 86.6%	93%
1.1.1g	Percentage of other most-at risk populations reporting condom use during last sexual intercourse with non-married non-cohabitating partner (disaggregated by risk group)	BSS 2006: 82% in truck drivers (Other baselines to be gathered)	90% (truck drivers)

according to specific risk factors; Output 6 deals with a specific context for HIV transmission, sexual violence; and Output 7 deals with the distribution of condoms.

Output 1.1.1.1: General population reached by comprehensive HIV prevention programs. The key indicators and targets for Output 1.1.1.1 are shown in Table 4. Key strategies:

- Outreach programs promoting safe sexual behavior including HIV/STI prevention education, anti gender-based violence communication and counseling, family planning, and condom promotion
- Community sensitization for promotion of safe sexual behaviors, including HIV testing and condom promotion
- Involvement of local authorities in community sensitization
- Involvement of the media in community sensitization
- Extension of youth friendly HIV prevention and reproductive health services
- Integration of sexual and reproductive health and HIV prevention componenta into schools' curricula
- Outreach work and provision of a complete package of prevention with out-of-school youth through peer education, including provision of information on SRH, HIV and STIs, gender based violence, condom promotion, life skills, and referral for HIV testing and STI
- Extension of counseling and testing services
- Improvement of quality of counseling and testing services

The main focus of this output is to ensure that all members of the Rwandan population are informed about HIV and STI prevention, and the existence of key services such as family planning, HIV testing, and condoms. A range of strategies will be used such as mass media communication, community events and outreach, and campaigns. Young people will be reached through school based sexual health and AIDS education, anti-AIDS clubs and outreach work for out of school youth.

School-based education can be controversial as many believe it encourages sexual activity. However, there is currently strong evidence that sex education for young people can encourage safer practices and delays in sexual debut. Informing people about HIV/AIDS, and increasing their ability to act on that information, will be complemented by improved access to services. Availability of HIV testing, STI treatment and condoms will be expanded, so as to ensure that the Rwandan population has access to these essential services.

Making HIV testing and condoms accessible to young people that need them is a key strategy under this output—for instance through training for "youth friendliness" or integration of services into youth centers. A particular emphasis will be the promotion and provision of couples counseling and testing for HIV, as an entry point for focused prevention work with people living with HIV and with sero-discordant couples (see Output 1.1.1.5). Activities under this output will be carried out at the national, provincial, district and sector level.

Output 1.1.1.2: Women aged 15-24 are at reduced risk of HIV infection. The key indicator and target for Output 1.1.1.2 is shown in Table 5. Key strategies:

- Improve understanding of specific vulnerabilities of women aged 15-24

Table 4—Indicators and Targets for Output 1.1.1.1: General Population Reached by Comprehensive HIV Prevention Programs

Number	Indicator	Baseline	Target by 2012
1.1.1.1a	Percentage of population who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission (disaggregated by age and sex)	DHS 2005: 51% in women 15-24 54% in women 15-49 54% in men 15-24 58% in men 15-49	70% in men and women aged 15-24 and 15-49
1.1.1.1b	Number of couples who have received couples HIV counseling and testing and who know their results in the last 12 months	TRAC Plus 2008: 101,139 couples tested	200,000 couples tested per year by 2012

- Outreach work with women aged 15-24 to promote safe sexual behaviors on HIV and STIs, referral for HIV testing and STI diagnosis, reproductive health services, condom promotion, services for victims of gender based violence and PMTCT

There is evidence that women aged 20-24 are at much higher risk of HIV infection than their male peers. It is likely that a significant proportion of new infections occur through sex with men at higher risk of HIV, for instance older men. Programs will work (separately) with adolescent women (15-18) and young adults (19-24) to better understand the risk factors and to help them to respond to the complex factors in the most realistic way. Women in these categories will be supported to carry out participatory assessments with their peers in order to assess what puts them at risk for HIV infection and the obstacles they face when trying to protect themselves from HIV. These assessments will form the basis for developing a range of communication, education, skills building, as well as community advocacy activities aimed at challenging norms (including gender norms) that make young women more vulnerable.

Finally, recognizing that the vulnerability of this population group is closely linked to behaviors and attitudes of their sex partners, the findings of assessments carried out in this group will be used to inform and strengthen strategies targeting other relevant population groups (for instance, males in the general population and mobile populations). Finally, services (in particular HIV testing, family planning, STI treatment) will be made more accessible to these groups, paying particular attention to barriers to accessing services that they themselves identify. Programs with this population group will be carried out in all administrative sectors by the end of 2012.

Output 1.1.1.3: Female sex workers are reached by comprehensive prevention programs. The key targets to be achieved for Output 1.1.1.3 are shown in Table 6 on. Key strategies:

- Conduct research to improve understanding of vulnerability and needs of sex workers (some components planned and costed in the M&E plan)
- Outreach to sex workers through peer education programs involving training sex workers; including provision of information on HIV and STIs, condom promotion, life skills and referral for HIV testing and STI diagnosis, violence, reproductive health services, VCT and PMTCT
- Reduce socio-economic vulnerability of sex workers
- Strengthen sex worker participation in policy development and program implementation
- Improve the environment for program with sex workers
- Extension of HIV (including testing), STI and family planning services to sex workers

Although situations in each location vary, some of the specific vulnerability factors for female sex workers

Table 5—Indicator and target for Output 1.1.1.2: Women aged 15-24 are at reduced risk of HIV infection

Number	Indicator	Baseline	Target by 2012
1.1.1.1a	Percentage of women aged 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission (disaggregated by age)	DHS 2005: 51% in women 15-24	70% in women aged 15-24

Table 6—Indicators and Targets for Output 1.1.1.3: Female Sex Workers are Reached by Comprehensive Prevention Programs

Number	Indicator	Baseline	Target by 2012
1.1.1.3a	Percentage of sex workers reached with HIV prevention programs	Baseline by 2009 (Triangulation)	60%
1.1.1.3b	Percentage of sex workers who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	BSS 2006: 36.2%	70%

include: discrimination in access to services; stigma in the community; violence; high numbers of sexual partners; and limited ability to negotiate safe sex. A specific strategy has been included to empower and strengthen the participation of sex workers in the definition of priorities, the design and implementation of programs, and the conduct of advocacy to tackle broader causes of vulnerability. Sex workers will be supported to carry out participatory assessments with their peers in order to assess what puts them at risk for HIV infection and the obstacles they face when trying to protect themselves from HIV. These assessments will form the basis for developing a range of communication, education, skills building, condom distribution (including female condoms, see Output 1.1.1.7), and advocacy activities aimed to help sex workers protect themselves from HIV infection. HIV testing and treatment, family planning, and STI diagnosis and treatment service providers will receive training to ensure that the attitudes of health care workers are not a barrier to access to health care for sex workers. Health insurance (Mutuelle) will be provided to reduce financial barriers to access.

Programs will also incorporate advocacy with local authorities and law enforcement agencies in order to ensure that the environment is supportive of prevention efforts with sex workers. Sex workers are often discriminated against in access to other development programs such as income generation, adult education, and education for their children. Programs will also aim to tackle this discrimination and improve access to these opportunities for sex workers, as a strategy for further reducing their vulnerability. Programs with sex workers will be carried out in each district by the end of 2012.

Output 1.1.1.4: Other vulnerable and most-at-risk populations are reached with comprehensive prevention programs. The key targets to be achieved for Output 1.1.1.4 are shown in aTable 7.

Key strategies:

- Operational research to identify risk populations and routine surveillance to monitor trends in behavior, prevalence, etc. (planned and costed in
- the M&E plan)
- Provision of specific counseling services for people with disabilities
- Outreach for people with disabilities
- Outreach work with prisoners and prison workers including HIV awareness campaigns and anti-AIDS clubs
- Advocacy with authorities to ensure a supportive environment for prevention with prisoners
- Extension of testing, HIV and sexual health services to prisoners: mobile VCT
- Outreach programs to migrant and mobile workers (truck drivers, moto taxi drivers, fishermen) through peer education programs, provision of information on HIV and STIs, referral for HIV testing, condom promotion and STI diagnosis
- Outreach for men who have sex with men through peer education programs including provision of information on HIV and STIs, referral for HIV testing and STI diagnosis
- Extension of testing, HIV and sexual health services to MSM
- Outreach for military/people in uniform through peer education programs including provision of information on HIV and STIs, referral for HIV testing, condom promotion and STI diagnosis
- Extension of counseling and testing services to military/men in uniform: mobile VCT
- Maintain HIV prevention programs for refugees and surrounding communities

This output incorporates a number of specific populations: MSM, prisoners, migrant workers, people with disabilities, people in uniform, refugees). Some of these

Table 7—Indicators and Targets for Output 1.1.1.4: Other Vulnerable and Most-At-Risk Populations are Reached with Comprehensive Prevention Programs

Number	Indicator	Baseline	Target by 2012
1.1.1.4a	Percentage of other most-at-risk populations reached with HIV prevention programs (disaggregated by population)	Baseline by 2009 (Triangulation)	60% in other most-at-risk populations
1.1.1.4b	Percentage of other most-at-risk populations who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission (disaggregated by population)	BSS 2006: Truck Drivers: 39.1% Other baselines to be obtained	70% in other most-at-risk populations

groups have been shown to be at high risk for HIV infection because of specific risk factors (MSM, prisoners), while for the others it is important to implement specific, targeted programs because they are not always systematically reached by the broader general population programs. Addressing sex between men in general, and within prisons, is a new area of work. Operational research will be carried out, and an emphasis will be placed on ensuring MSM are active in the design and implementation of these programs, to ensure that they are carried out in the most appropriate way.

A specific activity will be to ensure access to condoms and water-based lubricant for men who have sex with men (see Output 1.1.1.7). For all of the population groups under this output, attention will be paid to the various barriers they encounter in accessing information, services and products for HIV prevention. Health insurance coverage to ensure access to HIV and sexual health services will be provided as necessary.

Output 1.1.1.5: People living with HIV, including sero-discordant cohabiting couples, are provided with prevention services. The key target to be achieved for Output 1.1.1.5 is shown in Table 8. Key strategies:

- Outreach with PLWHA through prevention programs
- Expansion of CT for families and partners of PLWHA
- Expansion of diagnosis and treatment of STI, OIs for PLWHA (activities under Result 2)
- Expansion of access and utilization of FP and reproductive health services by PLWHA
- Increase of treatment adherence for PLWHA (activities under result 2)
- Outreach work with sero-discordant cohabiting couples including ongoing counseling, referral for HIV testing, reproductive health services, and PMTCT

"Prevention with positives" is an integral component of the comprehensive package for care, treatment and other support offered to people living with HIV. In terms of implementation, this output is therefore combined and related to Outcome 2.3: People living with HIV receive care and support according to needs. People living with HIV will receive counseling and support to protect themselves and others from further infection (including HIV infection). The prevention package will also include comprehensive care and treatment for HIV and opportunistic infections, and access to family planning/reproductive health services. Particular attention will be paid to prevention with people in sero-discordant couples to protect themselves from HIV infection.

The main risk factor for discordant couples is not knowing about the discordance. In Rwanda, and elsewhere, condom usage among stable couples is very low. Knowledge of sero-discordance is therefore a key factor in motivating couples to protect themselves—as part of a "Prevention with positives" package. Because discordance is not a characteristic of any given population group, discordant couples will be targeted through a broad strategy of promoting couple counseling and testing to people in stable relationships, as an entry point for "prevention with positives" and discordant couple prevention (see previous outputs).

Output 1.1.1.6: HIV infections resulting from sexual or gender-based violence are prevented. The key target to be achieved for Output 1.1.1.6 is shown in Table 9 on the next page. Key strategy:

- Reinforcement of linkages and referral systems between the community, police authorities and health services for comprehensive care of victims of sexual and gender-based violence

This result will be achieved via a two-pronged approach. The first is to support efforts aimed at preventing violence, including gender-based violence. Communication on the unacceptability of gender based violence will be integrated into different HIV communication programs (see previous outputs); community outreach efforts will also work to encourage reporting of sexual and gender-based violence.

Table 8—Indicator and Target for Output 1.1.1.5: People Living with HIV Including Sero-Discordant Cohabiting Couples are Provided with Positive Prevention Services

Number	Indicator	Baseline	Target by 2012
1.1.1.5	Percentage of those testing positive for HIV receiving complete prevention package	TRAC Plus 2008: 5%	80%

The second component relates to preventing new infections as a result of SGBV. This is the provision of support for victims of sexual or gender-based violence. A key component of this will be access to post-exposure prophylaxis, and addressing the barriers to accessing services. For instance, at present the point of entry for victims of gender-based violence is the legal system, which can delay the provision of urgent medical attention—this issue will be addressed at the policy level.

Output 1.1.1.7: Male and female condoms are available and accessible for all populations. The key targets for Output 1.1.1.7 are shown in Table 10. Key strategies:

- Increase in social marketing of both male and female condoms
- Strengthening of community based distribution initiatives of condoms to most-at-risk and other vulnerable groups
- Strengthen initiative for promotion of female condom use
- Expanding distribution of condoms in the private sector
- Strengthening of linkages between FOSA and CSO/CBOs for the distribution of condoms
- Strengthening of CSO umbrellas involved in prevention

Condoms are one of the essential tools for preventing sexual transmission of HIV, for preventing many STIs and for preventing unwanted pregnancies. Condoms are often stigmatized as being indicative of "immoral" conduct. Communication efforts described in Outputs 1.1.1.1 to 1.1.1.5 will help to open attitudes towards condoms.

Rwanda has had a national condom policy since 2005. However, the joint review of the 2005-2009 NSP and a Rapid Situational Analysis for condom programming in Rwanda conducted in the second half of 2008, identify a number of gaps in the implementation of condom programs. Sector strategies to explicitly address the identified gaps will be set in the detailed condom strategy and the recommendations will be taken into account to ensure more effective availability and accessibility of condoms both to the general population and to specific target groups, especially most-at-risk populations.

Social marketing programs will be improved to support public and private sector strategies for promotion of correct and consistent condom use and distribution of condoms to ensure better access to condoms by the general population. Greater emphasis than before will be paid to promotion of correct and consistent condom use for its dual role in terms of protection against HIV infection and unwanted pregnancies. Mass media communication on condoms will also be increased: this approach is required to raise awareness, increase acceptability of condoms in the general population, increase visibility of condoms and points of sales, as well as creation and promotion of new and easily accessible

Table 9—Indicator and Target for Output 1.1.1.6: HIV Infections Resulting from Sexual or Gender-Based Violence are Prevented

Number	Indicator	Baseline	Target by 2012
1.1.1.6a	Percentage of health facilities with post-exposure prophylaxis (PEP) available	SPA 2007: 28%	100%
1.1.1.6b	Percentage of women presenting at health facilities reporting rape who receive PEP according to national guidelines	Baseline by 2009	100%

Table 10—Indicators and Targets for Output 1.1.1.7: Male and Female Condoms are Available and Accessible for All Populations

Number	Indicator	Baseline	Target by 2012
1.1.1.7a	Total number of condoms available for distribution nation-wide during the last 12 months	Rwanda RHC 2009: Approximately 15,000,000 condoms	26,000,000 condoms
1.1.1.7b	Percentage of young women and men aged 15-24 who report they could get condoms on their own	DHS 2005: 37% in women 15-24 73% in men 15-24	60% in women 80% in men

outlets at the community level (Umudugudu level), especially in the most hard to reach geographical locations in the country.

Condom programming by different sectors (i.e., public, private, and social marketing sectors) will also include advocacy and involvement of authorities to influence behavior and destigmatize condom use, as well as reinforcement of linkages between FOSAs and CSOs, LNGOs, and local communities for condom promotion and distribution. Initiatives for promotion, distribution and training about consistent and correct female condom use will be strengthened, especially among women groups, to meet the preferences of condoms as well as empower women to make decisions about safer sex.

Reliable availability of condoms in FOSAs is an important component for community based programs as well as prevention with positives and or discordant couples at the health facility and community levels. In addition, more attention will also be given to initiatives for promotion of correct and consistent condom use and distribution by community based groups including LNGO, associations, peer groups, health volunteers, and CHWs. In addition, trained CHWs in collaboration with their respective health facilities will facilitate other groups in their local villages to provide interpersonal communication and sensitization about condom promotion as well as consistent and correct condom use. These interpersonal and community level condom promotion activities will be integrated into the targeted HIV prevention programs described in Outputs 1.1.1.1 to 1.1.1.5.

Targeted condom distribution programs will ensure that most-at-risk populations have continuous access. This will be carried out through outreach programs (condom promotions and distribution) as well as distribution in specific sites such as "hotspots". Each sector (i.e., public, private, civil society, and social marketing) will have community distribution strategies that suit specific target groups of communities.

3.1.3—Intermediate Outcome 1.1.2: Increased Prevalence of Male Circumcision

High coverage of male circumcision has been shown to be effective in reducing heterosexual transmission of HIV infection. Under this outcome, circumcision will be promoted to adult males, with the aim of increasing the prevalence of circumcision. In addition, although circumcision of newborn boys will not contribute to the result of reduced sexual transmission of HIV during the period covered by this NSP, it is nonetheless an important long-term strategy for reducing susceptibility to HIV infection in the Rwandan population. Progress in achieving Intermediate Outcome 1.1.2 will be tracked using the indicators shown in Table 11.

Output 1.1.2.1: Newborn boys, adolescents and adults have increased access to circumcision. The key target for Output 1.1.2.1 is shown in Table 12. Key strategies:

- Advocacy for integration of circumcision in minimum package of health centers
- Promotion and provision of male circumcision for adolescents and adults
- Promotion and provision of male circumcision for newborn boys

Table 11—Indicators and Targets for Intermediate Outcome 1.1.2: Increased Prevalence of Male Circumcision

Number	Indicator	Baseline	Target by 2012
1.1.2a	Prevalence of male circumcision among adolescent and adult men (disaggregated by age [10-19, 20+])	Intermediate DHS 2007/8: 15% in males 15-59	50% in men 10-19 30% in men 20+
1.1.2b	Proportion of males born in the last 12 months circumcised at a health facility	Not available	50% of newborn males in 2012

Table 12—Indicator and Target for Output 1.1.2.1: Newborn Boys, Adolescents and Adults Have Increased Access to Circumcision

Number	Indicator	Baseline	Target by 2012
1.1.2.1	Percentage of health facilities with staff who can perform male circumcision	SPA 2007: 21% of health facilities	80%

Making circumcision available to both adults and newborns will require considerable capacity building and advocacy to ensure that health centers are able to offer the service, as well as providing any related communication and follow-up activities. It will be progressively made available in the majority of FOSAs.

Different strategies will be adopted for promoting and providing circumcision to adults and newborns. In the case of adults, it is widely acknowledged that low-risk sexual behavior (reduction in concurrent sexual partnerships and consistent condom use) continue to be important for circumcised men, and that circumcision programs should address the potential for behavioral inhibition among men who accept circumcision. Communication on circumcision, which will be integrated into broader HIV communication efforts (see Intermediate Outcome 1.1.1), will take this into consideration. Although circumcision will be available to all adult males, voluntary circumcision will be particularly promoted to men with higher risk factors for sexual transmission of HIV, and men in settings such as the military and higher education establishments.

Circumcision for newborn boys is not problematic in terms of the potential impact on sexual risk behavior; nonetheless, it is important for service providers to clearly communicate to parents the purpose and advantages (not just in relation to HIV) of circumcision. Routine offer of circumcision for newborn boys will be integrated into infant immunization programs.

3.1.4—Intermediate Outcome 1.1.3: Increased Quality of Treatments of STIs

Awareness of the symptoms of STIs and of the importance of timely and correct treatment is limited in Rwanda, and availability of high-quality services for STI diagnosis and treatment is also limited. Screening for syphilis in women attending antenatal clinics in 2007 shows prevalence of 2.4% (3.5% for the city of Kigali, 2.5% for other urban sites and 2.4% for rural sites). However, while the prevalence of syphilis among those who are HIV negative is 2.2%, the prevalence of syphilis among those who are HIV positive is 9.1%. HIV prevalence among RPR positive women is 15.9% while among RPR-negative women it is 4.0%. Increasing treatment rates for STIs is an important strategy both in its own right and for further reducing susceptibility to HIV infection. Progress in achieving Intermediate Outcome 1.1.3 will be tracked by means of the indicator shown in Table 13.

Output 1.1.3.1: Increased awareness of STI symptoms and demand for STI treatment. The key target for Output 1.1.3.1 is Indicator 1.1.3. Key strategy:

- Integration of communication on STIs into general prevention communication

Focus group discussions conducted during the Joint Review of the NSP 2005–2009 indicated that levels of knowledge of STIs and STI symptoms are very low, and that there is a lot of discomfort discussing STIs and acknowledging their existence, because they have negative connotations with sexuality. In this context of denial it is hard to ensure better rates of treatment of STIs. Increased communication on STIs, in particular the symptoms, consequences, links with HIV transmission, availability of treatment, and the importance of seeking prompt treatment from a reliable source, will be a key strategy for increasing the rate of treatment. Communication on these subjects will be integrated into the HIV prevention communication strategies targeting different

Table 13: Indicator and Target for Intermediate Outcome 1.1.3: Increased Quality Treatment of STIs

Number	Indicator	Baseline	Target by 2012
1.1.3	Percentage of people reporting symptoms suggestive of STIs and seeking treatment from clinical services (disaggregated by sex)	DHS 2005: 12% in women 14% in men	60% in men and women

Table 14—Indicator and Target for Output 1.1.3.2: Increased Availability and Accessibility of High Quality STI Treatment

Number	Indicator	Baseline	Target by 2012
1.1.3.2	Percentage of health centers and hospitals offering STI treatment that have capacity to test for syphilis	SPA 2007: 40%	100%

population groups described (see Outputs 1.1.1.1 to 1.1.1.5), reflecting the importance of a "comprehensive" package approach rather than a fragmented one.

Output 1.1.3.2: Increased availability and accessibility of high quality STI treatment. The key target for Output 1.1.3.2 is shown in Table 14 on the previous page. Key strategies:

- Enhancing laboratory capacity for STI testing
- Integration of STI management into HIV services
- Provision of "friendly" STI diagnosis and treatment services for sex workers and their clients, and to MSM
- Provision of youth-friendly STI screening and referral services for the youth by youth friendly services

STI service provision is currently limited and strengthening health service capacity to provide effective STI treatment is therefore an essential condition for achieving this intermediate outcome on STI treatment. Special attention will be given to new treatment guidelines recently adopted and to be implemented from the beginning of this NSP period. These new guidelines will be disseminated during training and refresher courses for health care providers. Health facilities will be supported to improve laboratory capacity and procurement of STI medications. Attention will also be paid to ensuring that STI diagnosis and treatment are provided in a confidential and non-judgmental manner, in particular to groups that are stigmatized (such as sex workers and MSM) and to young people. FOSAs will be strengthened to provide these services by 2012.

3.1.5—Outcome 1.2: Reduction of Vertical (Mother-to-Child) Transmission of HIV

The estimated current number of cases of HIV transmission from mother to child is 7.2% at 18 months; however, Rwanda can still do more to improve geographical coverage of PMTCT services and rates of follow up of pregnant women testing HIV positive. During the period 2009–2012 the PMTCT program will be extended to all FOSAs in the country; the program will be maintained and further developed. In addition attention will be paid to ensuring that HIV positive women have access to family planning services; and that pregnant women have access to services and support for HIV prevention to avoid sero-conversion during the pregnancy period. Progress in achieving Outcome 1.2 will be tracked by means of the indicator shown in Table 15.

3.1.6—Intermediate outcome 1.2.1: Transmission of HIV During Pregnancy, Childbirth, and Breastfeeding is Reduced

This intermediate outcome is essentially based on the provision and scale up of the standard PMTCT package; attention is also paid to improving quality and follow up. Progress in achieving this intermediate outcome will be tracked by means of the indicator shown in Table 16.

Output 1.2.1.1: Increased availability and accessibility of PMTCT services. The key target for Output 1.2.1.1 is shown in Table 17 on the next page. Key strategies:

- Expansion of integrated PMTCT services in all health facilities to ensure national coverage

Table 15—Indicator and Target for Outcome 1.2: Reduction of Vertical (Mother-to-Child) Transmission of HIV

Number	Indicator	Baseline	Target by 2012
1.2	Percentage of HIV+ children born to known HIV+ mothers (at six weeks, five months and 18 months)	TRAC Plus 2008: 3.2 % at 6 weeks 2.8% at 5 months 7.2% at 18 months	2% at 18 months

Table 16—Indicator and Target for Intermediate Outcome 1.2.1: Transmission of HIV During Pregnancy, Childbirth, and Breastfeeding is Reduced

Number	Indicator	Baseline	Target by 2012
1.2.1	Percentage of HIV+ pregnant women who received antiretroviral therapy to reduce the risk of mother-to-child transmission	TRAC Plus 2008: 56%	90%

- Strengthening integration of PMTCT services in existing health facilities
- Increase ANC attendance by pregnant women
- Increase male uptake and family approach for PMTCT
- Increase delivery by pregnant women at health facilities

Scaling up provision of PMTCT will first and foremost require the provision of capacity building and resources in order to ensure availability of the service in all FOSAs. Another important strategy for scaling up PMTCT is to increase attendance of ANC; this will be done through increased community promotion carried out by community health workers and other community actors. Provision of health insurance coverage for the poorest will be provided in order to remove financial barriers to ANC. Sensitization will also be targeted to men to ensure partner support for attendance of ANC. The proportion of deliveries attended by health care workers and/or performed in health care facilities will also be expanded through community awareness-raising.

Output 1.2.1.2: All HIV positive pregnant women complete the full PMTCT program. The key target for Output 1.2.1.2 is equivalent to that for Intermediate Outcome 1.2.1. Key strategies:

- All pregnant women are routinely tested and counseled for HIV during pregnancy (at least at first and last ANC visit)
- Increase percentage of HIV+ pregnant women receiving ART as prophylaxis in PMTCT setting
- Increased case-finding so that HIV+ pregnant women who initiated PMTCT are followed-up to completion
- Reinforce linkages between health facilities and community
- Reinforcement of nutritional support for pregnant and lactating women and their babies
- Reinforcement of OI and STI screening, prophylaxis, treatment and referrals for HIV+ pregnant women
- Improvement of OI prophylaxis and treatment for HIV exposed infants

This output is aimed at ensuring that an increased proportion of HIV+ pregnant women are identified and that they are supported to complete the full PMTCT program. Systems will be put in place to reduce rates of loss to follow up, for instance by strengthening linkages between health facilities and community support systems and by ensuring HIV positive women and infants are referred for ongoing HIV treatment.

3.1.7—Intermeditate Outcome 1.2.2: HIV Positive Women are Empowered to Make Informed Reproductive Health Decisions

Women have very high levels of unmet family planning needs in Rwanda, including HIV positive women. As a result many HIV positive women are not able to make informed choices about becoming pregnant, and can be faced with judgmental attitudes when they do fall pregnant. Male partners also have an important role to play in ensuring women have autonomy in reproductive health decisions. Progress in achieving this intermedi-

Table 17—Indicator and Target for Output 1.2.1.1: Increased Availability and Accessibility of PMTCT Services

Number	Indicator	Baseline	Target by 2012
1.2.1.1	Number and percentage of health facilities that provide all four items from minimum PMTCT package	SPA 2007: 35% of all health facilities (68% among all health facilities offering any PMTCT services)	60% (90% of all health facilities offering any PMTCT services)

Table 18—Indicator and Target for Intermediate Outcome 1.2.2: HIV Positive Women are Empowered to Make Informed Reproductive Health Decisions

Number	Indicator	Baseline	Target by 2012
1.2.2	Percentage of women of reproductive age attending HIV care and treatment services with unmet need for family planning	TRAC plus and FHI 2009: 18%*	<10%

** Assessment of Family Planning and HIV Integrated Services in 5 Countries. This is an aggregate result for five countries (including Rwanda). No Rwanda-specific baseline.*

ate outcome will be tracked by means of the indicator shown in Table 18 on the previous page.

Output 1.2.2.1: HIV positive women have access to family planning. The key target for Output 1.2.2.1 is shown in Table19. Key strategies:

- Integration of family planning and HIV services
- Increase male involvement in family planning

Unmet need for family planning will be met by ensuring greater integration of services for HIV care, support, treatment, family planning, and other reproductive health services. This will require the development of tools, and the training of health care providers and community health workers, with particular attention given to addressing the attitudes of these toward single or HIV positive women, to ensure that family planning is provided in the context of needs rather than imposed.

Increased involvement of male partners of HIV positive women will be achieved through community-level promotion, through outreach services for HIV positive women and their families, and through the introduction of couple participation as a criterion for performance based funding of health services.

3.1.8—Outcome 1.3: Maintenance of Low Levels of Blood-Borne Transmission of HIV

Blood-borne transmission and transmission through donated organs is not believed to account for many new HIV infections in Rwanda, as blood donations are systematically screened for HIV and injection drug use is uncommon. In order to maintain this situation, blood screening will continue to be implemented and monitored, as will programs to ensure that universal precautions are adhered to in health facilities. The importance of avoiding blood exposure outside of clinical settings will be emphasized in mass communication efforts. Progress in achieving this outcome will be tracked by means of the indicator shown in Table 20.

Output 1.3.1.1: Blood-borne HIV transmission in clinical environments is reduced. The key targets for Output 1.3.1.1 are shown in Table 21. Key strategies:

- Reinforcement of universal precautions in all FOSAs
- Ensure access to PEP for all health care workers and other cases in need

Reinforcement of universal precautions will be achieved through systematic training of health care workers in

Table 19—Indicator and target for Output 1.2.2.1: HIV Positive Women Have Access to Family Planning

Number	Indicator	Baseline	Target by 2012
1.2.2.1	Percentage of health facilities offering integrated family planning services as part of ART	Baseline by 2009	80%

Table 20: Indicator and Target for Outcome 1.3 – Maintenance of Low Levels of Blood-Borne Transmission of HIV

Number	Indicator	Baseline	Target by 2012
1.3	Percentage of donated blood units screened for HIV in a quality assured manner	100%	100%

Table 21: Indicators and Targets for Output 1.3.1.1 – Blood-borne HIV Transmission in Clinical Environments is Reduced

Number	Indicator	Baseline	Target by 2012
1.3.1.1a	Percentage of people in the general population reporting that last injection was given with a syringe and needle taken from a new, unopened package	DHS 2005: 94.7% in women 89.4% in men	100%
1.3.1.1b	Percentage of health facilities with safe final disposal methods for sharps and infectious waste	SPA 2007: 92% for sharps waste 88% for infectious waste	100%

universal precautions, use of incinerators, waste management, and safe injections. Equipments and supplies to ensure universal precautions are practiced will also be provided. In order to further reduce the risk of transmission of HIV in clinical settings, policy on post exposure prophylaxis will be revised, health care workers will receive training to apply the protocols, and post-exposure prophylaxis drugs will be provided to health facilities. These strategies will be applied to all health facilities by 2012.

Output 1.3.1.2: All blood donated for transfusion is screened for HIV. Progress for this output will be measured through Indicator 1.3. Key strategy:

- Ensure blood safety in all health facilities (e.g., screening for HIV all blood donated for transfusion)

Blood screening protocols are already in place and being applied systematically. Appropriate training of health care workers will continue to be provided, as will equipments and supplies needed to ensure that blood safety procedures continue to be applied systematically.

Output 1.3.1.3: Blood-borne HIV transmission outside clinical environments is reduced. Progress for this output will be measured through Indicator 1.1.1.1. Key strategies:

- Raising awareness of general population on blood exposure risks and about PEP availability
- Ensure access to PEP for all exposed people outside of health facility settings

Although accidental blood-borne transmission probably does not account for a high proportion of incident HIV infections, it is nonetheless important in the context of a generalized HIV epidemic to ensure that the population is aware of the risks of blood-borne transmission and of the services that are available in case exposure to HIV is suspected.

As much as possible, this information will be provided through general HIV prevention communication (see Intermediate Outcome 1.1.1), although clearly it will not always be appropriate to provide this information in the context of sexual health communication programs. Information will also be provided within health care settings. All health care facilities will be provided with the training, equipment and supplies necessary to provide post exposure prophylaxis to patients where indicated. Capacity building in this area will be integrated with other PEP training (see Output 1.1.1.6 and Output 1.3.1.1).

3.2—IMPACT 2: MORBIDITY AND MORTALITY AMONG PEOPLE LIVING WITH HIV ARE REDUCED

This impact result targets the health status of people living with HIV/AIDS, their physical and mental well being. It therefore encompasses not only access to treatment and care, but also adherence to this treatment and quality of care. The indicator chosen for this result takes into account the EDPRS indicator and is also used by all major international stakeholders: Percentage of people still alive (adults and children) and on treatment 12 months after initiation of ART (baseline: 91%, target: over 90% in 2012).

This indicator is not perfect as it does not give any information about morbidity, and it is also not very sensitive as the gap between the baseline and the target for 2012 does not reflect appropriately the amount of efforts and improvements in the quality of services that are included in this whole care and treatment section.

However, it is the best one we have. This result will be achieved through the following three outcomes, related to specific types of service required to reduce morbidity and mortality within the framework of comprehensive care and treatment for people living with HIV:

- *Outcome 2.1*: People living with HIV systematically received OI prophylaxis, treatment, and other coinfection treatment
- *Outcome 2.2*: People living with HIV eligible for ART receive it
- *Outcome 2.3*: People living with HIV receive care and support according to needs

The overall strategic framework for this result is shown in Figure 8 on the next page.

3.2.1—Outcome 2.1: People Living with HIV Systematically Received OI Prophylaxis, Treatment and Other Coinfection Treatment

This outcome is subdivided into three outputs, designed to ensure that specific important co-infections and morbidities are adequately addressed within the framework of a comprehensive care and treatment package. Particular attention is paid to STIs and tuberculosis. Progress in achieving this outcome will be tracked by means of the indicator shown in Table 22 on the next page.

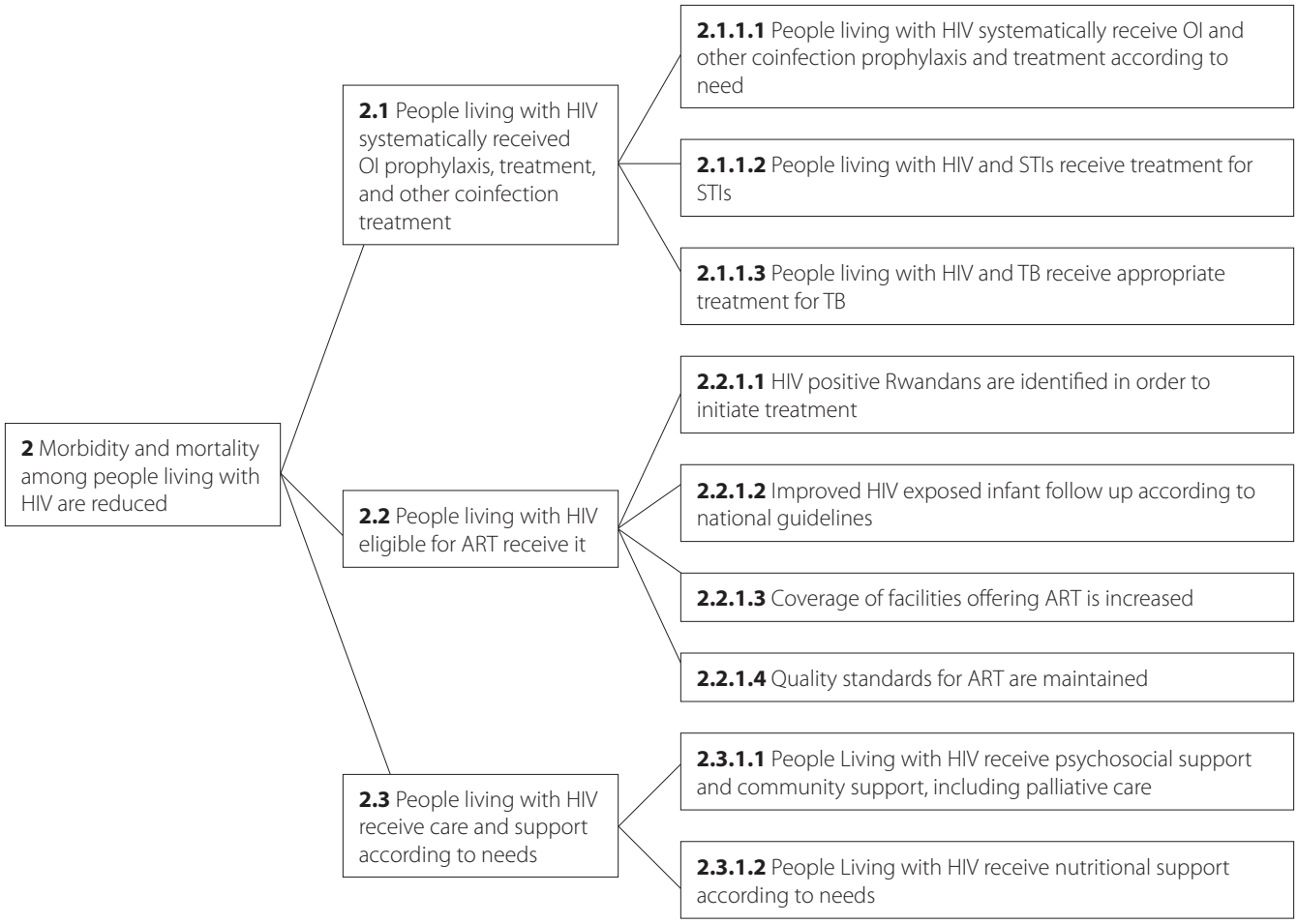

Figure 8—Care and treatment strategic framework: impact, outcomes, and outputs.

Output 2.1.1.1: People living with HIV systematically receive OI and other coinfection prophylaxis and treatment according to need. The key target for Output 2.1.1.1 is shown in Table 23. Key strategies:

- OI Service availability in each health facility
- Financial access to OI treatment to PLWHA
- FOSA capacity building to administer OI treatment
- Support to five referral laboratories
- Support National Reference Laboratory

OI prophylaxis: A recent directive from TRAC+ to no longer select PLHIV who should receive Cotrimoxazole (or alternatively Dapsone in case of allergy) according to their CD4 level, but rather to give it to all diagnosed HIV+ patients from the time of diagnosis. There is no documented baseline for this indicator, but the target for 2012 is that 90% of all diagnosed people living with HIV receive Cotrimoxazole for OI prophylaxis.

OI treatment: Activities described under this output include training of health care providers according to recently updated guidelines and support to laboratory capacity for all health facilities but particularly for five provincial referral laboratories and for the National Reference Laboratory. Increased financial access to treatment for people living with HIV through Health Community Insurance is located here, although it applies to the other aspects of treatment and care because it covers all HIV/AIDS patients who are unable to pay themselves for their annual Mutuelles fee. At the present time, 70% of Rwandans are covered by this insurance scheme, and the target in HSSP II is that 95% of the population be covered by 2012.

Output 2.1.1.2: People living with HIV and STIs receive treatment for STIs. Progress against Output 2.1.1.2 will be indirectly measured by Indicators 2.1.1.1 and 1.1.3.2. Key strategy:

- FOSA capacity building to treat STIs

STI treatment is mentioned as a separate output because of the significant role of STIs as co-factor of HIV infection. No specific activities are included under this output as the capacity building for increased STI service provision is dealt with under Intermediate Outcome 1.1.3 (Increased quality of treatment of STIs).

Output 2.1.1.3: People living with HIV and TB receive appropriate treatment for TB. The key target for Output 2.1.1.3 is shown in Table 24. Key strategies:

- FOSA capacity building to treat TB
- Increase case finding and diagnosis of TB in people living with HIV

Table 22—Indicator and Target for Outcome 2.1: People Living with HIV Systematically Received OI Prophylaxis, Treatment, and Other Coinfection Treatment

Number	Indicator	Baseline	Target by 2012
2.1	Percentage of people enrolled in HIV care and treatment who receive cotrimoxazole prophylaxis in the last 12 months	Baseline by 2009	85% in adults and children

Table 23—Indicator and Target for Output 2.1.1.1: People Living with HIV Systematically Receive OI and other Coinfection Prophylaxis and Treatment According to Need

Number	Indicator	Baseline	Target by 2012
2.1.1.1	Percentage of hospitals and health centers offering full package of HIV services (VCT, PMTCT, ART)	TRAC plus 2008: 43%	100%

Table 24—Indicator and Target for Output 2.1.1.3: People Living with HIV and TB Receive Appropriate Treatment for TB

Number	Indicator	Baseline	Target by 2012
2.1.1.3	Percent of HIV-positive patients who were screened for TB in HIV care or treatment settings (at the end of the reporting period)	TRAC Plus 2008: 59% during six month reporting period	80%

TB collaborative activities are highlighted here because of the important interrelation between TB and HIV. TB diagnosis in children is difficult; scoring technique is proposed as a method to improve identification of TB infected children. For systematic screening of TB among PLWHA, the directive is to ask the five questions at every consultation, and the answers should be noted in the patient's record every six months for documentation. TB testing will be done for all patients suspected of TB according to the screening tool. Capacities will be strengthened in health centers to improve TB case detection and treatment (or referral to treatment centers) and in communities for improved sensitization and mobilization on TB. The objective of TB collaborative activities is the setting up of "one stop services" where patients will have access to a complete package of services for both HIV and TB diagnosis and treatment. This is consistent with the national TB strategy.

3.2.2—Outcome 2.2: People Living with HIV Eligible for ART Receive It

Rwanda already has good coverage of ART according to existing protocols. However, the threshold for initiating ART has been increased from CD4<200 to CD4<350, so major efforts are required to increase capacity to deal with new patients, to identify new patients, and to maintain and further improve quality. The main challenge will be to attract people who are infected but still healthy to come for testing and subsequently for regular treatment, as the majority of people presently under treatment have only been detected after symptoms had appeared (mean CD4 count at the time of initiation of treatment=144 in 2005).

Further expansion of voluntary counseling and testing as well as provider initiated testing is an important strategy for increasing coverage of ART. As treatment will progressively be initiated earlier in the course of the disease, this will have a positive impact on prevention of new infections, as patients under treatment have greatly reduced infectivity. Progress in achieving this outcome will be tracked by the indicator shown in Table 25.

Output 2.2.1.1: HIVpositive Rwandans are identified in order to initiate treatment. The key targets for Output 2.2.1.1 are shown in Table 26 on the next page. Key strategies:

- Increase communication campaigns to encourage HIV testing (costed under sexual prevention outputs)

Table 25—Indicator and target for Outcome 2.2: People living with HIV Eligible for ART Receive It

Number	Indicator	Baseline	Target by 2012
2.2	Percentage of adults and children eligible for ART receiving it (disaggregated by treatment initiation eligibility criteria [CD4 <200, CD4 <350])	77% in adults (CD4 <200) 80% in children (CD4 <200)	CD4 <200: 90% in adults CD4 <350: 70% in adults, 90% in children

Table 26—Indicator and Target for Output 2.2.1.1: HIV Positive Rwandans are Identified in Order to Initiate Treatment

Number	Indicator	Baseline	Target by 2012
2.2.1.1a	Percentage of women and men aged 15-49 who received an HIV test in the last 12 months and who know their results	DHS 2005 (last 12 months): 11.6% in women 15-59 11% in men 15-49 BSS 2006 (ever tested): 12.6% in girls 15-24 11.3% in boys 15-24	35% (last 12 months)
2.2.1.1b	Percentage of pregnant women who were tested for HIV and know their results	75% (estimation based on model)	90%
2.2.1.1c	Percentage of partners of pregnant women in ANC who were tested for HIV in the last 12 months and who know their results	TRAC Plus 2008: 78%	90%
2.2.1.1d	Percentage of health facilities offering Provider-Initiated treatment (PIT)	Not available	90%

- Increase service coverage to FOSAs including VCT and PIT
- Public private partnerships for expanding HIV testing

The first condition for HIV positive Rwandans to have access to treatment is that they are aware of their serologic status. A major effort will be undertaken during this NSP period to increase the percentage of people in the general population who have passed an HIV test in the last 12 months, from 11% (according to DHS 2005) to 35% in 2012. Mass communication campaigns will be conducted both for the general population and for specific target groups (see under sexual prevention strategies).

In order to respond to the expected increased demand for HIV testing, capacities will be strengthened in health facilities so that all health facilities offer VCT and PIT, increasing both geographic accessibility and service availability. Public/private partnerships are promoted to facilitate access to care and treatment for employees of private companies or enterprises who have been diagnosed HIV+ during workplace mobile testing and need to have medical follow up to receive appropriate HIV care and treatment.

Output 2.2.1.2: Improved HIV exposed infant follow up according to national guidelines. The key target for Output 2.2.1.2 is shown in Table 27. Key strategies:

- Promotion of community-based follow up of exposed infants
- Integration of HIV exposed infants follow up in MCH (Vaccination, IMCI)

Community health workers will be important links between the health facility where an HIV positive mother has given birth and the community where she lives with her child to ensure that she will follow the prescribed schedule of visits to the health facility and HIV testing for the child to ensure early infant diagnosis and treatment. According to the national guidelines, HIV exposed infants should be tested at six weeks, one month after weaning and at 18 months. Another strategy to improve the follow up of HIV exposed infants is to integrate it with regular maternal and child health activities that are largely attended by mothers and their newborn infants (vaccination, IMCI). One essential tool to ensure the success of this strategy is the utilization of a single comprehensive health booklet where all health interventions for a child will be documented. This will enable the health care provider to identify infants who should be followed up for HIV testing. This output will be coordinated with the PMTCT program described under Outcome 1.2.

Output 2.2.1.3: Coverage of facilities offering ART is increased. Progress for Output 2.2.1.3 is tracked through Indicator 2.1.1.1. Key strategies:

- Increase the availability and coverage of ART at the health facility level
- Strengthen the supply and distribution of drugs and commodities
- Implementation of task shifting

The objective during this NSP period is that all health facilities provide a comprehensive package of HIV services including ART services. This will include rehabilitation of existing facilities and construction of new ones (about 50) to reach the target set by the MoH to have a health center in each administrative sector (500 by 2012). Recruitment of additional health staff, training and supervision of health care workers is another essential condition to improve coverage of ART services, with a particular effort to implement the task shifting strategy adopted by the MoH.

With the increasing number of patients under ART, it is impossible for all patients to be followed regularly by a medical doctor as has been the case until now. Prescription of simple first line treatment and follow up of uncomplicated cases will be performed by competent nurses with specific training to upgrade their skills in this domain. Support to the supply and distribution of drugs and commodities, through CAMERWA and district pharmacies will be organized to ensure constant

Table 27—Indicator and Target for Output 2.2.1.2: Improved HIV Exposed Infant Follow-Up According to National Guidelines

Number	Indicator	Baseline	Target by 2012
2.2.1.2	Percentage of children of HIV+ mothers who received an HIV test at 18 months	TRAC plus 2008: 75%	90%

and regular availability of all necessary medications and other medical commodities and avoid stock-outs. Presently, 195 health facilities provide ART services out of 452 existing (43%) and the target is that all 500 health facilities expected to exist in 2012 will offer ART services (100%).

Output 2.2.1.4: Quality standards for ART are maintained. The key target for Output 2.2.1.4 is shown in Table 28. Key strategies:

- Establish and enforce a national quality standard
- Strengthen the M&E system to identify and trace patients lost to follow up
- PLHIV receive adherence support at FOSAS and in community

National quality standards will be established and systematically enforced through training and supervision of health care workers, motivation of staff through PBF (performance based financing), and periodic assessment of the quality of services. A surveillance system will be established to detect and monitor the development of HIV drug resistance to ensure that these patients have access to an alternate drug regimen. Special attention will be given to reduce the number of patients lost to follow up and to increase adherence by improving the links between health facilities and the community and to set up a system for the close monitoring of treatment compliance.

Outcome 2.3: People Living with HIV Receive Care and Support According to Needs

Care and support outside of medical treatment is essential to a comprehensive approach to care for people living with HIV/AIDS. Support will include nutritional support, psychosocial and community support, and palliative care. Progress in achieving this outcome will be tracked by means of the indicator shown in Table 29.

Output 2.3.1.1: People living with HIV receive psychosocial support and community support, including palliative care. The key target for Output 2.3.1.1 is shown in Table 30. Key strategies:

- Integrate psychosocial support and mental health in the routine follow up of HIV patients
- Provision of psychosocial support to PLWHA

After post-test counseling where people tested positive for HIV get appropriate psychological support to face their diagnosis, psychosocial and community support must be systematically integrated into the regular follow up of HIV patients, with specialized care for those who present more severe psychological distress related to their illness. An initial psychosocial assessment will be performed on all newly diagnosed patients to identify those with special needs.

Table 28—Indicator and Target for Output 2.2.1.4: Quality Standards for ART are Maintained

Number	Indicator	Baseline	Target by 2012
2.2.1.4	Percentage of viral load suppression after 12 months of treatment	Baseline by 2010	70%

Table 29—Indicator and Target for Outcome 2.3: People Living with HIV Receive Care and Support According to Needs

Number	Indicator	Baseline	Target by 2012
2.3	Percentage of adults who received follow-up adherence assessment and counseling as part of psychosocial support package	Baseline by 2010	90%

Table 30—Indicator and Target for Output 2.3.1.1: People Living with HIV Receive Psychosocial Support and Community Support, Including Palliative Care

Number	Indicator	Baseline	Target by 2012
2.3.1.1	Number of PLHIV who received at least one home visit and/or palliative care service in last 12 months	Baseline by 2009	22,000

This is an important part of the strategy to prevent loss to follow-up. Adapted strategies have to be developed to address special needs of children (including "groupes de paroles") and adolescents who have grown with the virus and are confronting new challenges about their sexuality and desire for parenthood. Self support groups should also be facilitated for all HIVpositive patients interested. All patients who are getting to the stage where they need ART will have pre-ART counseling and education to explain to them possible side-effects and the importance of regular treatment. All pregnant women who are already on ART should have specific counseling.

Individual special psychosocial consultations will be addressed for specific situations: poor adherence, treatment failure, alcoholic and substance abuse, and problematic couples among others. Community based care will be strengthened in particular to encourage social reintegration activities and home visits will be organized for lost to follow up patients and those who abandon treatment, as well as for families in need of intense counseling. Psychosocial palliative care and support will be provided for all bed-ridden patients and their families.

All these different aspects of psychosocial care and support will require recruitment, training and supervision of health workers dedicated to the implementation of these strategies, and also rehabilitation of health facilities to ensure confidentiality during individual counseling sessions.

Target: 91,361 beneficiaries (all HIV positive patients should have at least the initial counseling, and afterwards, different types of interventions are addressed depending on individual needs).

Output 2.3.1.2: People living with HIV receive nutritional support according to needs. The key target for Output 2.3.1.2 is shown in Table 31. Key strategies:

- Availability and integration of nutritional support in all ART sites
- Nutritional support for eligible people under treatment

New national guidelines for nutritional support for all malnourished people describe criteria of inclusion into the program and will be applied to PLWHA as to others. Apart from temporary nutritional supplementation, the program also includes access to funds for IGA and agricultural production to ensure better food security for vulnerable households in a sustainable manner (linked to Result 3).

3.3—IMPACT 3: PEOPLE INFECTED/AFFECTED BY HIV/AIDS HAVE THE SAME OPPORTUNITIES AS THE GENERAL POPULATION

This result focuses on actions to help alleviate the impact of HIV/AIDS on health, economic and social wellbeing. We know that HIV/AIDS have negative effects, not only on the health of individuals and families, but also on their economic and social wellbeing. We also know that improvements in access to ARV are helping PLHIV to remain healthier and therefore economically active for longer so that activities such as income generation activities and capacity building/education are becoming an increasingly important part of the care and prevention package for people living with HIV and their families. In addition, the social environment of PLHIV has to be supportive, exempt of discrimination and stigmatization. And for that the legal framework must be clear regarding the rights of PLHIV.

This impact result aims to ensure that persons infected and/or affected by HIV/AIDS have the same access to services as the rest of the community, and that being infected and/or affected by HIV/AIDS does not constitute a barrier or obstacle to accessing services—social, economic, psychosocial, etc. This is not to say that persons infected and/or affected by HIV/AIDS should have more or less access than any other vulnerable group, but that one's status (whether infected or affected) does not affect access or opportunities.

Equal opportunities mean persons infected and/or affected by HIV/AIDS are given the opportunity to remain, or become, active members of their communities

Table 31: Indicator and Target for Output 2.3.1.2 – People Living with HIV Receive Nutritional Support According to Needs

Number	Indicator	Baseline	Target by 2012
2.3.1.2	Number of people living with HIV benefiting from nutritional support in the last 12 months	Baseline by 2009	42,000

and to live without stigma and discrimination like others (non-infected or affected people). Those reached by interventions under this result are: people who are HIV positive, the families of PLHIV, and also those who may not be HIV positive but who are affected by the virus, particularly orphans and vulnerable children (OVC).

This result will be achieved through the following three outcomes, related to specific types of service required to reduce morbidity and mortality within the framework of comprehensive care and treatment for people living with HIV:

- *Outcome 3.1*: People infected/affected by HIV (including child headed households) have improved economic opportunities and social protection
- *Outcome 3.2*: Social and economic protection are ensured for orphans and vulnerable children
- *Outcome 3.3*: Reduction of stigma and discrimination of PLWHA and OVC in the community

The overall strategic framework in Figure 9 on the next page.

3.3.1—Outcome 3.1: People Infected/Affected by HIV (Including Child-Headed Households) Have Improved Economic Opportunities and Social Protection

This outcome encapsulates a range of support designed to help people infected with and affected by HIV, including child-headed households, to cope with the economic and social impacts of HIV. Programs will help to foster a culture of entrepreneurship that will enable beneficiaries to develop their economic activities but rely on their own initiatives and abilities. This constitutes something of a major shift from previous programs. Guidance and financial support will be provided to ensure the success of the strategy. Progress in achieving this outcome will be tracked by means of the indicator shown in Table 32.

Output 3.1.1.1: Increased skills and education for infected/affected persons (including child household heads). The key target for Output 3.1.1.1 is shown in Table 33. Key strategy:

- Capacity building for infected and affected people with HIV

Education and skills are important to accessing to economic opportunities, that is why this output is proposed. Support under this output will consist of literacy training, entrepreneurship and management training, best practices sharing between cooperatives etc. To promote economic opportunities for people living with HIV, income generating activities undertaken by cooperatives are one of the privileged strategies. The review has shown that there is a marked weakness in the skills of people living with HIV for planning and management of their cooperatives. Training to improve their skills in this domain is essential to ensure better success in their economic projects.

Output 3.1.1.2: Creation of employment opportunities for infected and affected persons (including child household heads). The key target for Output 3.1.1.2 is shown in Table 34 on page 73. Key strategies:

- Development of entrepreneurship among people infected and affected by HIV
- Create links between the industry and people infected and affected by HIV to access markets

Table 32—Indicator and Target for Outcome 3.1: People Infected/Affected by HIV (Including Child Headed Households) Have Improved Economic Opportunities and Social Protection

Number	Indicator	Baseline	Target by 2012
3.1	Percentage of PLHA who have gone at least one day without food	Rwanda Stigma Index 2008: 59% (58% females, 62% males)	<20%

Table 33—Indicator and Target for Output 3.1.1.1: Increased Skills and Education for Infected/Affected Persons (Including Child Household Heads)

Number	Indicator	Baseline	Target by 2012
3.1.1.1	Percentage of PLHA who have no formal education	Rwanda Stigma Index 2008: 16.8% (19% females, 12% males)	<5%

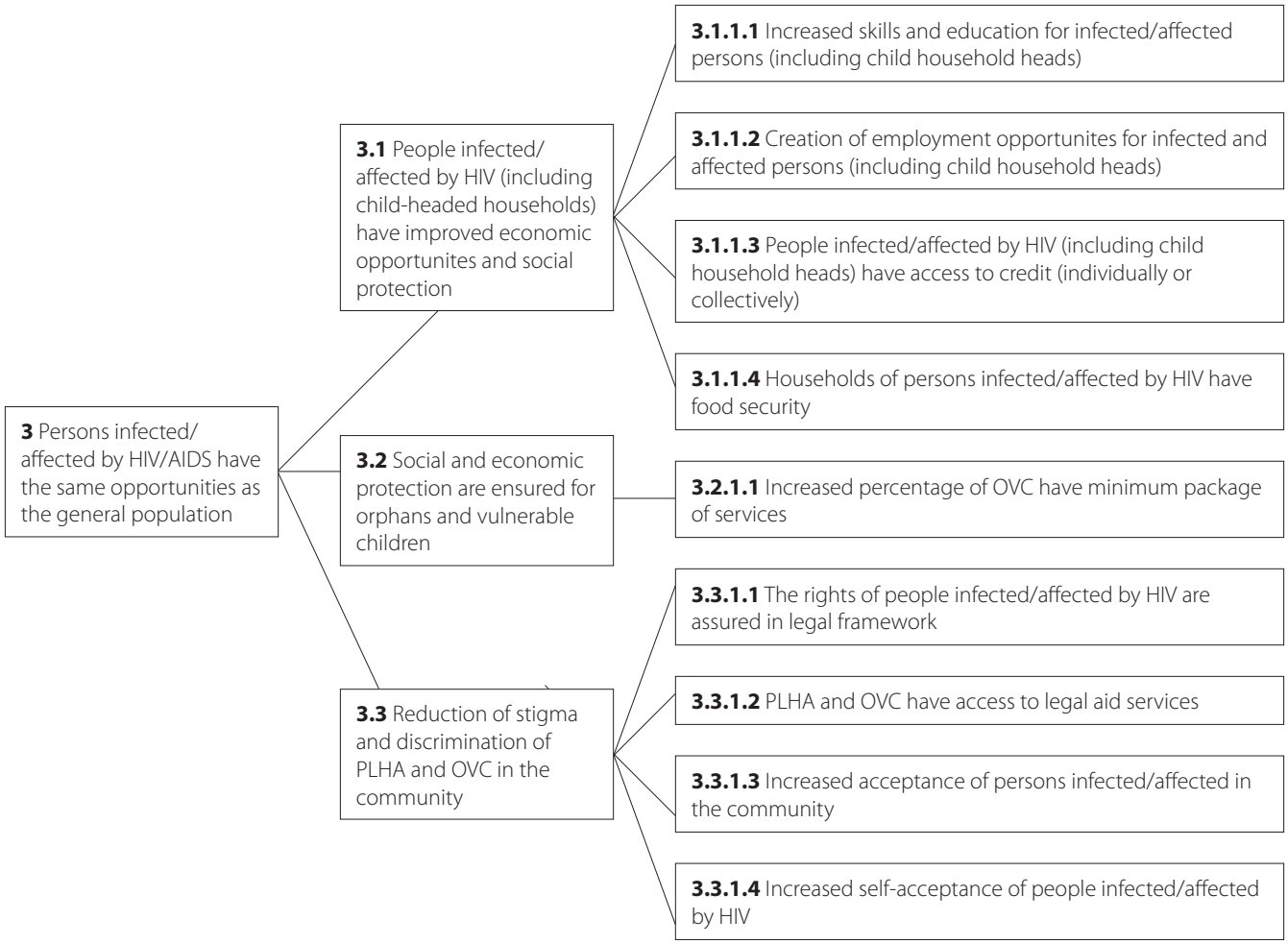

Figure 9—Impact mitigation strategic framework: impact, outcomes, and outputs.

One of the key failures of all the micro-projects and grants that have been given to cooperatives and associations has been the lack of a business supportive environment. Access to business support services (market information, accounting, financial management, business planning, inputs, technical production support and development, and many others) is therefore a key component. As well as training people living with HIV in livelihood skills, support will be provided to:

- Assist people living with HIV in market research and project design (business plan) to enable the project to compete on the market and to be self-sustaining. This will include support on management and on creating market linkages, for instance through linking suppliers and retailers, related industries, etc., as a basis for assessing potential areas for business development.
- Provide small amounts of initial capital required to start-up the IGA, once market opportunities have been identified and linkages to markets have been made. Capital support will be provided to viable plans rather than being provided in response to any request, as in the past IGA programs have failed because they have focused solely on capital provision.

Output 3.1.1.3: People infected/affected by HIV (including child household heads) have access to credit (individually or collectively). The key target for Output 3.1.1.3 is shown in Table 35. Key strategies:

- Create a guarantee fund for cooperatives formed by people infected and affected by HIV
- Create partnerships and alliances with financial institutions

Previously, cooperatives/associations of people living with HIV were receiving financial support directly from donors for micro-projects to develop IGA. The objective of this new strategy is that financial partners supporting economic opportunities for people living with HIV place capital in selected financial institutions (banks or microfinance) so cooperatives will have easier access to credit. Presently, it is very difficult for those organizations to borrow money as financial institutions do not trust their ability or desire to reimburse their loan. With this guarantee fund, these institutions will be more inclined to lend money to these cooperatives. Financial institutions involved in this strategy are important and crucial partners in this effort to promote equal rights and opportunities to people living with HIV in the field of economic activities. Regular meetings where these new activities are reviewed and assessed with all stakeholders involved are important to create this dynamic of partnership for a common goal. Provision of external credit will not be the only strategy for capitalizing projects. It will often be appropriate to introduce alternative ways of capitalizing cooperatives, including internally generated sources such as savings, retained earnings share capital, dividends, etc.

Output 3.1.1.4: Households of persons infected/affected by HIV have food security. Progress for Output 3.1.1.4 will be tracked through Indicator 3.1. Key strategies:

- Improve food production for PLWHA
- Raise awareness of good nutritional practices among PLWHA
- Create community nutrition programs based on the concept of positive deviance
- Increase agricultural skills

Table 34—Indicator and Target for Output 3.1.1.2: Creation of Employment Opportunities for Infected and Affected Persons (Including Child Household Heads)

Number	Indicator	Baseline	Target by 2012
3.1.1.2	Percentage of PLHA who are unemployed or not working at all	Rwanda Stigma Index 2008: 20.4% (21% females, 20% males)	<10%

Table 35—Indicators and Targets for Output 3.1.1.3: People Infected/Affected by HIV (Including Child Household Heads) Have Access to Credit (Individually or Collectively)

Number	Indicator	Baseline	Target by 2012
3.1.1.3	Percentage of cooperative members applying for credit who accessed credit mechanism per year	Baseline by 2009	70%

This output is articulated around two types of strategy: the first one, based on agronomic techniques, will be implemented with the help of the agriculture sector to provide agricultural inputs and technical support to PLHIV for improvement and diversification of their food production. The second one focuses on nutritional education and improvement of the way PLHIV and their families aliment themselves. Community nutrition programs based on a positive deviance approach have proven to be very effective to modify alimentation behaviors of communities.

3.3.2—Outcome 3.2: Social and Economic Protection are Ensured for OVC

Support of OVCs is a major part of impact mitigation of HIV/AIDS implemented by the HIV sub-sector, but there are many others ministerial sectors who gave support to OVCs. The lead Ministry to coordinate OVC support in the country is MIGEPROF. Policies and strategies are defined by MIGEPROF, and the HIV sub-sector contributes to OVC national achievements. An orphan is a child who has lost one or both parents. A vulnerable child is a person younger than 18 years of age, exposed to conditions that limit the fulfillment of his or her fundamental right to development. Progress in achieving this outcome will be tracked by means of the indicator shown in Table 36.

Output 3.2.1.1: Increased percentage of OVC have minimum package of services. The key targets for Output 3.2.1.1 are shown in Table 37. Key strategies:

- Improve management and coordination transparency of OVC program
- Provision of package of support to OVC

The main challenge in OVC programs is coordination. Coordination is carried out at the decentralized level by district authorities and at the national level by MIGEPROF. However, coordination is lacking because districts have limited capacity to implement it. The strategy here is to strengthen districts in identification of OVC, management of the OVC database, and monitoring and evaluation of community programs for OVC.

The last DHS reported that only 0.2% of OVCs have access to at least three basic services needed; the target set in the EDPRS by MIGEPROF is 10% in 2012. The target seems low but this is explicable by the fact that coordination is still weak, even though it is a condition for effective support. It will take two years to build this capacity. The second main precondition is to ensure that adequate funding is available to ensure the minimum package, which can include up to six different services.

3.3.3—Outcome 3.3: Reduction of Stigma and Discrimination of PLWHA and OVC in the Community

Stigma and discrimination continue to pose challenges to efforts to ensure that people infected and affected by HIV are equal beneficiaries in national development and poverty reduction. Specific measures are proposed

Table 36—Indicator and Target for Outcome 3.2: Social and Economic Protection are Ensured for OVC

Number	Indicator	Baseline	Target by 2012
3.2	Percentage of OVC aged 0-17 whose households received free basic external support in caring for the child	DHS 2005: 12.6% at least one type of support 0.2% all types of support	30% at least one type of support 10% all types of support

Table 37—Indicators and Targets for Output 3.2.1.1: Increased Percentage of OVC Hhave Minimum Package of Services

Number	Indicator	Baseline	Target by 2012
3.2.1.1a	Percentage of OVC who meet national criteria for vulnerability that are in district registers	Baseline by 2009	100%
3.2.1.1b	Current school attendance among orphans and non-orphans aged 10-14	DHS 2005: Lost both parents: 70.1% in boys, 78.8% in girls Non-OVC: 88.1% in boys, 90.1% in girls	>90% in boys and girls

to ensure the protection of the rights of people infected and affected, in communities and in workplaces. Progress in achieving this outcome will be tracked by means of the indicator shown in Table 38.

Output 3.3.1.1: The rights of people infected/affected by HIV are assured in legal framework. The key targets for Output 3.3.1.1 are shown in Table 39. Key strategies:

- Review the existing laws to ensure the rights of PLWHA
- Advocate for adoption and enforcement of laws to protect the rights of PLWHA

The law in Rwanda is quite clear that there should not be any discrimination and stigma against PLWHA on the grounds of HIV status in terms of employment, in society, in health services access, etc. But its actual implementation by PLWHA is the challenge because they didn't know about their rights. Education of PLWHA on their rights is one of the activities proposed in this framework.

Until now, no study has been done to show that there is a gap in the legal framework regarding the rights of PLWHA; this activity is proposed and if gaps are identified, new legal clauses will be drafted and proposed at the national level.

Output 3.3.1.2: People living with HIV/AIDS and OVC have access to legal aid services. The key target for Output 3.3.1.2 is shown in Table 40. Key strategy:

- Ensure the accessibility of legal aid services to those infected and affected by HIV

Once awareness of people living with HIV regarding their rights is increased, many of PLWHA can't access services to protect their rights because of the cost; and also because of the lack of knowledge of where to seek support or make complaints. The proposed activities aim to assist people with legal aid. Training for paralegals on human rights issues for people living with HIV and OVC will also be provided.

Table 38—Indicator and Target for Outcome 3.3: Reduction of Stigma and Discrimination of PLHA and OVC in the Community

Number	Indicator	Baseline	Target by 2012
3.3	Percentage of PLHA who report fear of being physically harassed and/or threatened	Rwanda Stigma Index 2008: 36% (32% female, 37% male)	<15%

Table 39—Indicators and Targets for Output 3.3.1.1: The Rights of People Infected/Affected by HIV are Assured in Legal Framework

Number	Indicator	Baseline	Target by 2012
3.3.1.1a	Laws are protective of the rights of persons infected/affected by HIV	Baseline by 2009	Yes
3.3.1.1b	System for officially documenting cases of stigma and discrimination exist	No	Yes

Table 40—Indicator and Target for Output 3.3.1.2: People Living with HIV/AIDS and OVC Have Access to Llegal Aid Services

Number	Indicator	Baseline	Target by 2012
3.3.1.2	Number of PLHA receiving legal aid when needing it	Baseline by 2009	[process only]

Output 3.3.1.3: Increased acceptance of persons infected/affected in the community. The key target for Output 3.3.1.3 is shown in Table 41. Key strategy:

- Raise public awareness of rights of people living with HIV/AIDS

Stigma and discrimination in communities will be reduced through awareness campaigns, largely integrated with the overall prevention communication under Outcome 1.1. In addition, awareness will be raised in places of work by initiating workplace interventions in the public and private sector, with co-workers and employees. According to EDPRS targets, 60% of private enterprises are expected to have established an HIV workplace program by 2012. Another strategy will be to promote partnerships between HIV-positive and HIV-negative individuals that helps break down stigma and discrimination at the community level which otherwise undermines the rights of PLWHA. All social and medical support provided to people living with HIV/AIDS under this and the other results will pay particular attention to the issue of self-stigma.

Output 3.3.1.4: Increased self-acceptance of people infected/affected by HIV. The key target for Output 3.3.1.4 is shown in Table 42. Key strategy:

- Provision of social support to PLWHA

Table 41— Indicator and Target for Output 3.3.1.3: Increased Acceptance of Persons Infected/Affected in the Community

Number	Indicator	Baseline	Target by 2012
3.3.1.3	Percentage of population expressing accepting attitudes in relation to people living with HIV	RDHS 2005: 46.1% in women 15-49 51.0% in men 15-59	90% in men and women

Table 42—Indicator and Target for Output 3.3.1.4: Increased Self-Acceptance of People Infected/ Affected by HIV

Number	Indicator	Baseline	Target by 2012
3.3.1.4	Percentage of people living with HIV/AIDS who confronted, challenged or educated someone who was stigmatizing and/or discriminating them	Rwanda Stigma Index 2008: 50%	90%

4. RISKS FOR THE NATIONAL RESPONSE, AND MITIGATION STRATEGIES

A number of risks have been identified as being particularly important to address in order to ensure that the results outlined in the NSP are achieved. The risks outlined are equally relevant to prevention, treatment and impact mitigation efforts.

RISK	MITIGATION STRATEGY
Implementers plan and carry out their programs in an isolated way, focused on their own priorities and capacities. The consequence of working in this way is that programs do not always effectively respond to real needs, causing gaps in key services as well as duplication in others.	The NSP commits those responding to HIV/AIDS in Rwanda to working in a more "integrated" or synergistic way than before. This is quite a big shift, requiring well facilitated coordination at national and local levels. CNLS and CDLS will be strengthened to lead this coordination work. Specific coordination mechanisms may also be developed to ensure coordination on some of the new focuses of the NSP, such as prevention work with most-at-risk populations, and ensuring seamless links between community- and facility-based aspects of HIV care, treatment and support. The main challenge will be to demonstrate to implementers that it is to the advantage of the communities they are serving, and to their own advantage as implementers, to plan in a harmonized way with other actors.
Poor continuity of service delivery: In treatment, continuity of service provision is an accepted principle because the consequences of treatment interruption are well understood. However this is not the case for prevention efforts. Threats to continuity in prevention include: • Condom stock-outs (whether in health facilities or in other outlets) • "One-off" education and communication programs, especially in institutions (schools, prisons, workplaces) • Sporadic outreach programming, because CSOs are often weak and do not receive "continuous" funding commitments. Lack of continuity in community programs can also reduce the effectiveness of treatment—for instance if there are interruptions in the provision of treatment adherence support, and nutritional support, as well as social support for orphans and vulnerable children.	Policies and guidelines will be strengthened to ensure that programs are designed to address needs over the "long term" rather than just providing "one-off" actions. Because lack of continuity is particularly felt in community-based interventions (as opposed to facility-based), additional efforts will also be expended to strengthen community systems. This will require a substantial shift in how community interventions are funded, particularly in relation to most-at-risk population prevention programming where mobilizing the interest of marginalized groups requires long-term programming. District level planning mechanisms will be strengthened so that they ensure better integration between communities and facilities, emphasizing the dependence of the clinic on good community interventions. Technical support will help to ensure not only that the content of programs is right, but that the services are provided adequately over time.

RISK	MITIGATION STRATEGY
Challenges in making the shift toward targeted prevention: The prevention component of the NSP calls on actors to make a significant shift from a general population approach toward working with marginalized populations such as sex workers, men who have sex with men, and prisoners — or even sexually active young people. Experience in Rwanda and elsewhere has shown that prioritization of groups in a national strategy does not always result in prioritization on the ground. This is especially the case with marginalized groups that are hard to reach or that implementers and service providers do not want to work with, because of judgmental attitudes or even legal barriers.	To mitigate this risk activities have been planned to generate leadership on these issues at the national and local level, to ensure that sound public health thinking and human rights based approaches are applied. These activities include measures to ensure active participation of the groups concerned in assessing the barriers and in explaining to decision makers and service providers why it is essential to improve their access to services. In addition, training will be provided to health care personnel and other service providers in order to ensure they have the correct skills and approach to working with these groups. Civil society organizations will be strengthened to carry out these strategies, as they are often better placed to reach out to marginalized groups, in particular when these groups do not trust officials or service providers.
Persistent, widespread poverty creates a challenge for targeting those affected by HIV with support services, as the needs for these support services are not solely among people living with HIV.	The NSP includes actions to harmonize the types of services and support provided, to improve the application of selection criteria, and to improve the governance of programs—reflecting the strength of purpose of the current Rwandan government in emphasizing good governance, and anti-corruption measures. At the same time, care will be taken not to provide disproportionate support solely to people affected by HIV in settings where needs for such support are generalized.
Gaps in knowledge of the epidemic: Although this NSP is based on a thorough review of epidemiological data, there are still gaps in knowledge and more data are likely to emerge over the NSP period. This is not a major risk as it is unlikely that major factors have not been accounted for in the analysis so far.	New surveillance will be introduced among additional potential risk groups such as MSM; and biological surveillance among sex workers and mobile workers is planned. With emerging data there will be continuous improvement of modelling and updating of program targets as necessary.
Poor coordination at the local level: Although the CDLS mechanisms are in place, there is still a lack of skills of local government agents to enhance better communication and collaboration between HIV/AIDS programs and with the community. Moreover, there is a tendency to resort to "enforcement" approaches to coordination, which puts some actors off cooperating.	Further guidance will be provided on how to operate coordination at local level, and analyses will be carried out to identify how best to remodel CDLS to ensure they are functional. Training, formative supervision, and clarification of roles and approaches will all contribute to enhancing local level coordination.
Poor use of evidence and program data at local level to inform planning and implementation. Although data collection mechanisms have improved in recent years, data usage is still limited, seriously compromising the appropriateness of programs.	Further training will be provided to the agents responsible for tracking and disseminating data, as well as investment in improving mechanisms for data collection and dissemination. CNLS will support the CDLS assistants to facilitate data usage activities at the district level.

RISK	MITIGATION STRATEGY
Increased targets for program implementation are essential in order to achieve impact but they must be accompanied by strengthening of capacity. Examples of ambitious targets are the target for ART coverage (as a result of lowering the threshold for initiating treatment) as well as prevention and impact mitigation targets.	Plans for strengthening health systems to ensure absorptive capacity to treat new ART patients and to provide second line treatment where needed, are included in the NSP. The major increase in support for community-based organizations is essential to ensure that they play an even bigger role in the response, particularly in the provision of outreach and community support services.
Income generation activities for people living with HIV have showed mixed results to date, and there is a risk this will continue as long as there is no consensual approach towards business development and financial support mechanisms. Although limited access to capital is often cited as a problem, poor business planning is an even more fundamental issue.	The NSP includes plans to ensure more creative ways of supporting IGAs. First and foremost it emphasizes ensuring that initiatives have a solid business plan and links to markets. In terms of capitalization, approaches will not be limited to direct provision of credit, but will look at different ways of capitalization, and persuading lenders to be more open to support HIV+ groups.
There is a lack of acknowledgement of how HIV affects individuals, including the effects of stigma and discrimination. As a result it becomes harder to design and provide targeted support to people infected and affected with HIV, and can make it difficult to ensure programs achieve planned results.	The key strategy to resolve this is to improve the collection of data on how HIV does and does not affect people living with HIV and those affected. A survey using the new instrument, the HIV Stigma Index, was completed in late 2008 and provides baselines for impact mitigation efforts under the NSP. This sort of data collection will be strengthened. Furthermore, continued support will be provided to RRP+ so as to strengthen leadership and improve the rigour in describing the impact of HIV/AIDS.

PART
3

Coordination and Implementation of the NSP

1. INSTITUTIONAL FRAMEWORK

1.1—GOVERNANCE, COORDINATION AND IMPLEMENTING BODIES

1.1.1—National Level Leadership and Coordination

SE-CNLS is the national coordinating agency responsible for ensuring that all HIV interventions in Rwanda are harmonized and aligned with national priorities and strategies, in keeping with the Three Ones principles (one national coordinating body, one national strategy, one national M&E framework). To achieve this, a standard format has been designed both for annual plans and for quarterly and annual reporting that is used by all partners involved in the national response to HIV/AIDS. Annual plans and annual reports are developed by all districts, economic sectors, and umbrella organizations and are consolidated into a national HIV annual plan and annual report.

Different steering committees have been set up to coordinate partners in various domains: HIV technical working group within the Health cluster, IEC/BCC, Condom, Research, Donors coordination (PEPFAR, ADB/UNDP, GLIA, GF/MAP PMU), OVC support, M&E, civil society and the SE-CNLS plays an active role in all these committees to ensure adequate collaboration between all partners. A number of other coordination mechanisms are described below: CDLS, EDPRS sectors, civil society, the private sector, regional initiatives and reference institutions. The SE-CNLS also plays a stewardship role in ensuring that each of these coordination mechanisms functions effectively, by providing guidance and identifying support where necessary.

1.1.2—Decentralized/District Level Leadership and Coordination

In each administrative district, there is an AIDS Control committee (CDLS) whose mandate is to coordinate the local response at the district level. This committee is under the administrative authority of the district (it reports to the district mayor) and under the technical guidance of CNLS. It is formed of representatives of decentralized public services (health, education, planning), of mass organizations (national women and youth councils), and of civil society organizations (people living with HIV/AIDS, NGOs, and FBO networks, as well as people with disabilities in some districts). It gathers all actors of the local HIV response to elaborate the annual work plan and annual report at the decentralized level. It ensures that national orientations are respected by the local actors and that local specificities are taken into account in the planning, implementation and evaluation of district HIV activities. Each committee is supported by two full-time technical assistants.

1.1.3—EDPRS Sectors

Roles of sectors in implementation: The Economic Development and Poverty Reduction Strategy (EDPRS) is the reference document orienting the overall national effort for economic and social development. In this plan covering the 2008-2012 period, HIV is addressed as a crosscutting issue and priority activities have been identified in all 12 economic sectors, which include not only ministries and public institutions, but also all private and community organizations involved in the same field of activities. The 12 sectors are as follows:

- Health, Population, Nutrition, HIV/AIDS
- Infrastructure and energy
- Justice
- Decentralization, citizen participation and accountability
- Security
- Youth
- Agriculture
- Private sector
- Education
- Capacity building and employment promotion
- Water and sanitation
- Social protection

Given the decentralized government structure, implementation of HIV/AIDS activities by each sector will take place primarily at the district level and, therefore, the EDPRS HIV indicators and activities have been adjusted and incorporated as appropriate into the five-year District Development Plans (DDP) and district annual work plans.

Coordination: Under the coordination of a lead ministry, each of the 12 EDPRS sectors has a strategic plan, as well as an annual work plan, within which HIV/AIDS activities are integrated. Under the HIV/AIDS NSP, the SE-CNLS will support each lead ministry to develop the most effective and supportive ways of

coordinating the HIV/AIDS activities undertaken by the sector at the district level. Each sector has put in place an HIV focal point that has the responsibility to coordinate the implementation of its HIV priority activities at central and decentralized levels. In turn, the CDLS will play a vital role in ensuring that the actions of different sectors are delivered in a coordinated way at the district level.

1.1.4—Civil Society Organizations

Implementation: Civil society organizations will be major contributors to the implementation of the NSP. In the field of prevention, many outreach activities for the general population will be implemented in the community by CHW and/or CSOs, while some CSOs have specialized in outreach for specific target groups such as transport workers, sex workers and prisoners. Thirty-seven percent of VCT services are provided in religious and private sites.[7] Thirty-six percent of PMTCT sites are managed by FBOs.[8] Civil society organizations will be important actors for the implementation of new strategies developed in this NSP for delivery of a comprehensive package of preventive interventions for identified most-at-risk populations and for different target groups (people with disabilities, discordant couples, PLHIV for positive prevention).

There will be a concerted effort to improve collaboration and coordination mechanisms between CSOs and the health services to ensure complementarity and synergy of their interventions.

In the field of care and treatment, 40% of health care facilities are managed by FBOs and are fully integrated in the health care system. There is good collaboration with MoH and public coordinating bodies to ensure quality of care and respect of national guidelines.

Associations and cooperatives of people living with HIV and affected people have been key players in the implementation of activities aimed at mitigating the impact of HIV/AIDS including IGAs. FBOs are also heavily involved in the provision of psychosocial support to people living with HIV and OVCs. Improved harmonization is needed to provide a standardized package of services for nutritional support, for a minimum package of services for OVC, and to establish a harmonized approach for stigma reduction. In all these areas of activities, civil society's role as a major implementer will be enhanced by improved mechanisms of collaboration with public services and within the established national framework for comprehensive packages of services.

Coordination: The different sectors of civil society are coordinated by five umbrella organizations:

- The Rwanda NGO Forum on HIV/AIDS was created in 1999 and has 160 member organizations, including international NGOs, national NGOs (operating in more than one district), and local NGOs (operating in one district only). National and local NGOs also work with CBOs at the grassroots level (sectors).
- The Rwanda Faith-Based Organizations Network against AIDS (RCLS) was created in 2003. It brings together FBOs from the five main confessional groups present in Rwanda: the Catholic Church, the Protestant Council of Rwanda which includes 22 Protestant Churches, the Evangelical Alliance of Rwanda which includes 44 Churches, the Muslims, and the Anglican Church. The Rwanda Network of Religious Leaders living with AIDS (RWANERELA+) with a membership of 136 religious leaders also belongs to the RCLS.
- The Rwanda network of PLHIV (RRP+) was created in 2003. Its member organizations were originally associations of PLHIV and people affected by HIV. More than 500 out of the 1,361 associations of PLWHA have already transformed into cooperatives in order to conform to Rwandan legislation requiring that all organizations undertaking income generating activities and redistributing profits to their members should have a cooperative status.
- The Umbrella of People with Disabilities in the Fight against HIV/AIDS (UPHLS) was created in 2006. The HIV-related programs of 80 disabled people organizations are coordinated by the umbrella.
- ABASIRWA is a network of journalists working in approximately 70 mass media outlets (newspapers, radio and TV stations).

7. The Global Fund. Multi-Country Evaluation Study of the Scale up to fight AIDS, TB and Malaria with Special Reference to the Global Fund. Final Country Impact Evaluation Report. Rwanda. September 2008
8. Ibid.

Civil society umbrella organizations have various roles in common in relation to coordination:

- Encourage and facilitate the coordinated planning of HIV interventions of their members in order to avoid the duplication of interventions targeting the same groups in the same area and ensure a good coverage of the population by those interventions.
- Collect and compile data on the HIV-related activities of their members, giving the picture of the overall response to HIV of their respective constituencies.
- Document best practices and disseminate them amongst their members and to external partners.
- Represent their constituencies in national decision-making bodies such as the CCM, technical working groups, steering committees, and other ad-hoc committees where they work closely with the government while advocating for a better recognition of the role of civil society in the response to HIV.

In addition, umbrellas also have specific objectives in relation to building the capacity of their respective constituencies. This is described in later sections.

1.1.5—Private Sector

To coordinate the HIV response in enterprises of the private and para-public sectors, the Rwandan Private Sector Federation has set up an HIV Unit. This unit has the mandate to support and oversee HIV committees set up in private enterprises and Business Development Committees based at the district level. This coordinating body of the private sector is still young (created in 2008) and replaces APELAS, the previous umbrella of the private and para-public sectors, that initiated a lot of activities but could never establish a strong presence in this sector because of a lack of representation of the enterprises' leadership within its structure. This new umbrella, because of its direct link with the private sector federation, is well placed to develop HIV activities in private enterprises.

1.1.6—Regional and International Programs

The main regional program in action is Great Lakes Initiative against AIDS (GLIA) which covers six countries (Kenya, Uganda, Tanzania, Democratic Republic of Congo, Burundi, and Rwanda) and focuses on harmonization and improvement of HIV/AIDS services to mobile and migrant populations (refugees, long distance truck drivers, fishermen). This regional approach ensures that people living with HIV moving across borders will be provided with similar services from one country to another, for a better quality and continuity of care. It also aims at reducing the risks of HIV infection associated with migration.

1.1.7—National Reference Institutions

Apart from central coordination bodies, there are several technical institutions linked to the MoH who play an important role in the coordination of specific technical aspects of the HIV response.

The Treatment and Research AIDS Centre (TRAC+) coordinates the clinical aspects of the national response to Malaria, TB and HIV. Inside of TRAC+, the HAS unit coordinates HIV, AIDS and STI activities. The mission of the HAS unit is to carry out national monitoring of HIV/AIDS and to provide a technical assistance to public and private sectors involved in the prevention (VCT and PMTCT) and clinical treatment of HIV/AIDS in Rwanda.

The HAS unit is responsible for national planning, formulation of policies, training of trainers, and the development of the curricula for clinical programs. It provides technical assistance and gives guidelines in the organization and effective management of HIV/AIDS control programs. It is also responsible for monitoring, evaluation and coordination of the performance of the health sector as a whole to reduce HIV/AIDS. It ensures the coordination of research on STI, OI, VCT /PMTCT, TB and ART, as well as socio-behavioral research.

The National Reference Laboratory (NRL) is in charge of biomedical aspects of HIV/AIDS, OI, and STI (in particular testing, quality control and research).

The National Center for Blood Transfusion (NCBT) supervises and ensures the quality of all blood transfusion services in the whole country. It presently has three operational regional blood centres and plans to add two more to have a regional centre in each province.

The Health Communication Center (HCC) coordinates both mass media and community outreach campaigns, and supervises quality of sensitization messages and content of training for journalists and for health workers.

The Central Agency for the Purchasing of Essential Drugs in Rwanda (CAMERWA) imports, stores and distributes essential drugs, ARV and medical consumables. It is responsible for procurement in this area in collaboration with TRAC.

1.2—IMPLEMENTATION OF THE NSP

1.2.1—Framework for Implementation

The NSP will be implemented by a wide range of actors. Under the framework of the EDPRS, these actors are grouped according to the 12 economic sectors. This framework helps to ensure that each sector is making the most appropriate contribution to the response to HIV/AIDS, and more importantly that each sector contributes according to its potential. The lead ministry for each sector will drive the process of mobilizing the range of entities within the sector to engage in the response.

Although some sectors have a clear role in delivering certain specific services—such as the role of the health sector in health service delivery—the roles of many of the sectors may differ according to the specific context or population group toward which programs are targeted. Hence, the primary implementation framework for the NSP is based on whether the activity is implemented in a community setting, or in a facility or institution; in addition, there is a category of activities that can be described as "enabling environment". The distinction between these three categories is important because the capacities, planning and funding required in each case are quite different. These are further explained below.

Community settings: A wide range of activities in the NSP will be implemented in community settings. Community settings are defined broadly, and can even include specific locations such as bars, markets, truck stops—essentially, places where people live and work. Activities carried out at this level will contribute to all three of the Results of the NSP: preventing HIV infections, reducing mortality and morbidity, and mitigating the impact of HIV. They will include "outreach" type activities aimed at empowering, educating, informing and supporting communities—for instance, peer education activities for HIV prevention; support groups for people living with HIV, including treatment adherence support; and psychosocial support for orphans and vulnerable children. They can also include provision of services such as mobile HIV testing and home-based care and support, and training and education. Community-based distribution of condoms and nutritional support are also examples of activities that can be carried out in a community setting.

Activities in community settings can be carried out by actors that come from any of the different sectors. For instance, prevention outreach carried out in a truck stop is likely to be closely associated with the transport (infrastructure) sector; community care and support will be carried out predominantly by the health sector—through community health workers. Civil society organizations, whether they are predominantly working within the health sector or one of the other sectors, will be particularly present in the implementation of these activities. A particularly important role for civil society organizations will be to work with marginalized populations which governmental institutions can find hard to reach.

Facilities and institutions: Facilities refer, for the most part, to the health sector, in particular to community health centers or more specialized facilities. Although health facilities are most commonly associated with the provision of HIV testing, treatment, care, and support, they will also play a major role in preventing new HIV infections, through PMTCT, male circumcision, STI treatment, and more broad sexual and reproductive health service provision. Skills development (for HIV prevention or for socio-economic development), support, and HIV testing carried out in youth centers or other locations are also considered to be "facility-based".

Institutions is a broad category including educational establishments, prisons, and workplaces (in terms of the provision of "classic" HIV prevention, testing, and care services), and also less obvious institutions such as courts in the case of legal aid provision for people bringing cases of HIV related discrimination, and credit, finance, or business development institutions that are important partners for HIV impact mitigation programs. Facilities will also play a role in distribution of condoms and in the distribution of material assistance and nutritional support.

Once again, the precise type of activity and the target population for each activity will be the basis for defining the roles of different sectors; and again civil society organizations will have an important role to play where they are managing facilities or working to provide services in facilities.

Enabling environment: Unlike the previous two categories, the activities in this category are not directly aimed at the users or participants of services or programs. The activities under this category are aimed at removing factors in the overall environment that constitute barriers to effective implementation of activities directed at the population. These barriers can exist at different levels—for instance, the lack of condoms in prisons or limited sexual health education in schools may be influenced by policy at the national level, or by decisions taken by staff of each institution.

Remedying such issues requires planned, focused advocacy efforts at the different levels. Lead ministries of EDPRS sectors have a particular role in developing good policies and in ensuring they are implemented on the ground; however, advocacy efforts will be most effective when undertaken by a coalition of actors from different sectors and from both governmental and non-governmental entities.

"Barriers" also exist at the level of individuals who provide services or who are responsible for program implementation. The particular emphasis of this NSP on marginalized populations poses a particular challenge in this respect as many service providers are not experienced in working with such groups, and some are reluctant to do so. Activities at this level include sensitization and training aimed at building skills and tackling stigmatizing attitudes.

Bringing the three categories together: The dividing lines between these three categories of activities are not "hard", and in most cases the same actor will find themselves intervening in each category. This makes sense because they are closely linked, and it is especially important to bring the experiences of the population to bear on efforts aimed at making the environment more favorable. For instance, the involvement of members of marginalized or affected groups in conducting advocacy or training activities is a powerful strategy that will be employed as far as possible, as they are best placed to identify and explain the ways in which they are excluded from services or programs.

In terms of service provision, strong linkages between facility- and community-based activities are also essential, because it is rarely possible to provide a complete "package" via just one channel. Community health workers are at the nexus between community- and facility-based health services: similar models need to be found to strengthen linkages between social service provision, and indeed between the services provided for each overall result of the NSP. The CDLS will play the major role in facilitating and maintaining these connections.

1.2.2—Operationalizing of the NSP at Implementation Level

This NSP document includes a general operational plan identifying for each activity the actors involved, the general timeframe, and the budget estimation. Based on this general plan, each actor will develop its own work plan taking into account the orientations given by the NSP, both at central and decentralized levels. In early 2009, CNLS will develop a detailed operational plan describing each strategy in the NSP, working with sectors and entities to define the best means of implementing each activity. This is particularly important as several of the strategies described in the NSP bring new concepts and working methods as compared to the present implementation of activities. All concerned actors and stakeholders will be invited to participate in this reflection with the aim to translate principles and general orientations of the NSP into concrete actions at the community level.

At the national level, each EDPRS sector will develop its annual operational plan, drawing on the NSP to guide the implementation of its HIV priority activities.

At the district level, all actors involved in the local HIV response will come together to elaborate the district annual work plan. This will give each actor the opportunity to design interventions that fit within the general plan. Care will be taken to ensure that district plans are based on local evidence to respond to specific needs and priorities in the fight against HIV. This requires both a good communication system between all actors at the district level and effective technical support from central and decentralized bodies to ensure that this work plan is aligned with the national strategic plan.

The SE-CNLS will therefore play a central role in this process, giving all implementing entities and the CDLS clear guidelines on planning methodology and providing targeted supervision to facilitate this process and afterwards to monitor the implementation of planned activities. CNLS will work closely with EDPRS sector coordination agents, other coordinating bodies, and CDLS technical assistants to ensure these agents play their role for planning, monitoring and evaluation of all HIV activities.

1.3—PARTNERSHIP FOR GREATER HARMONIZATION AND ALIGNMENT OF DONORS WITH NSP PRIORITIES

The successful implementation of the NSP will depend, to a large extent, on the continued support of Rwanda's development partners, comprising official donors, local and international NGOs, civil society, and the private sector. The government recognizes the key role played by dialogue with its various partners, and to this end it continues to support and strengthen a number of groups and forums aimed at enhancing the quality of dialogue, coordination of development activities, and harmonization of donor assistance.

In line with the Paris Declaration on Aid Effectiveness, the Government of Rwanda also recognizes the importance of mutual accountability in its relationships with donors, and will take steps to strengthen these reciprocal obligations through the use of new and existing systems. Increased attention will be accorded to aid and its effectiveness in the joint sector reviews, with a view to ensuring that external assistance is coordinated in an effective manner at the sector level. A large number of international NGOs are actively involved in the HIV response in Rwanda. Most of them are providing prevention, care and treatment, and impact mitigation services. There are also multilateral (UN agencies) and bilateral cooperation organizations (USAID, Lux Dev, etc.) providing technical support to Rwanda in its fight against HIV/AIDS.

Since January 2007, Rwanda has been one of eight pilot countries for 'the UN delivering as One or One UN'. Hence, UN agencies are working towards 'One Program', 'One Budgetary Framework', 'One Leader' and 'One Office'. The objective of the 'One UN' pilot is to enable the UN system to better align its program on national priorities and to provide a more effective and coherent response to the needs of the Government of Rwanda and its development partners. In May 2007, The UN Country Team finalized its second United Nations Development Assistance Framework (UNDAF) for 2008-2012, which provides the necessary programmatic coherence for the implementation of the 'One Program' model. The UNDAF 2008-2012 is aligned to the Economic Development and Poverty Reduction Strategy (EDPRS) and Vision 2020. A Common Operational Document (COD) 2008-2012 guides the implementation of the UNDAF and Consolidated Annual Work Plans (CAP) are developed every year.

2. INSTITUTIONAL CAPACITY BUILDING

2.1—COORDINATION, PLANNING, M&E

Central coordination institutions (CNLS, TRAC+, umbrellas) will elaborate a capacity building plan for their staff in order to meet their responsibilities in term of coordination, planning and M&E. At the decentralized level, CDLS will also strengthen their coordination capacities in order to become the primary coordinating body for all HIV activities taking place in the district and to ensure that planning and implementation of HIV local response is based on evidence and local situation analysis. Specific training will be organized to improve the effectiveness of CDLS sub-committees (cooperative organizations, IEC, OVC support).

2.2—CLINICAL SERVICE PROVISION

Health care providers will also benefit from a comprehensive capacity building plan to ensure that they are regularly informed and trained on new national guidelines and advances in knowledge about the disease and care and treatment methods. Special attention will be given to the results of numerous clinical or service organization studies/evaluation that give important indications to improve quality of services and should be widely disseminated to health care providers.

2.3—COMMUNITY SERVICE PROVISION

With the elaboration of a national policy on community health workers, the content of these important agents at the community level will be standardized to ensure homogeneous quality and scope of their interventions, regardless of the development partner they are collaborating with.

The interaction and regular communication between health facilities and the community health workers will be an important channel for the continuing training of the CHW. Members of community-based organizations involved in the provision of services at the community level will also need to receive standardized training to ensure the quality of their interventions.

A general observation for capacity building of these different groups of actors is that a systematic training plan should be elaborated at the central level, on the basis of needs identified during regular formative supervision and the best approach for complementary training should be selected according to specific situations and constraints. In all cases, the quality of the content of the training and the competence of trainers will be verified.

3. HEALTH SYSTEMS AND COMMUNITY SYSTEMS STRENGTHENING

Rwanda is recognized as being a country where the rapid expansion of HIV/AIDS programming has driven improvements in the health sector—all the while showing success in achieving results in the fight against HIV/AIDS. The example of Rwanda is particularly important in a context where it is common to describe HIV/AIDS programs as "vertical" and inherently compromising to the health system. In achieving even more ambitious targets on HIV/AIDS, this NSP will continue to further expand the capacities of the health sector. At the same time, renewed attention will be paid to strengthening the community sector, a vital component of an effective response.

3.1—HEALTH SYSTEMS STRENGTHENING

In this section are listed the main inputs necessary to implement all activities of the NSP. In the logical framework and the description of activities, these inputs have been mentioned under the domains where they are the most crucial, but it must be understood that they are also necessary for other activities under which they are not listed to avoid repetition and double counting.

3.1.1—Human Resources

Retention of existing health staff and recruitment of additional medical personnel (doctors, nurses, assistant nurses, lab technicians) and community health workers is necessary to achieve the targets set for this NSP. Existing staff and newly recruited staff need to be trained and regularly supervised and have refresher courses to ensure their knowledge is up to date and adapted to new guidelines and changing therapeutic methods.

Apart from the needed increase in number and competence of staff, there is also a need to improve the quality of services provided by this staff by improving their motivation. Performance-based financing, already in place for district hospitals and for some specific tasks in health centers, should become generalized in order to motivate health staff to provide the best quality of service possible with their limited resources. Task shifting, mainly to transfer to trained nurses some responsibilities presently reserved for medical doctors, such as ARV prescription and regular follow-up of ART patients on first line drugs without complications, is a necessary strategy in view of the rapidly increasing number of ART patients and the inability to staff all health centers in the short term with medical doctors. This strategy has already been adopted by the government and will be implemented during the course of this NSP.

3.1.2—Infrastructure/Equipment

In order to achieve the target that all health facilities (500 district hospitals and health centers by 2012) provide complete HIV services (VCT/PMTCT/ART), a substantial effort will be made to build new centers (around 50) and rehabilitate existing ones and to equip them with necessary items to deliver these services. This includes purchase of vehicles (ambulances, motorcycles), ICT equipment, and equipment and supplies for community health workers.

Development of laboratory infrastructure and equipment will be an important part of improving health facilities capacities to provide more comprehensive and better quality services: increase the number of people being tested for HIV (through VCT, PIT, PMTCT, with an emphasis on the strategy of couple and family testing) and improve the laboratory capacities of health centers for diagnosis of opportunistic infections, for CD4 counts, and in reference laboratories for viral loads. The target for HIV testing is to increase from about 12% of people aged 15-49 who have been tested in the last 12 months and know their result to 35% by 2012. To support and complement the quality of laboratory services at the health facility level, the national reference laboratory (NRL) and five provincial referral laboratories will be supported with staff training, infrastructure and equipment strengthening for bacteriology and parasitology diagnosis.

3.1.3—Procurement/Supply Chain Management

CAMERWA, which has a mandate of ensuring availability and accessibility of quality generic and essential drugs to national health facilities, orders and distributes 80 percent of medications in Rwanda including all essential drugs. It also oversees procurement for reagents, medical supplies, and key health commodities. In collaboration with the MOH (the process of setting

up National Drug Regulatory Authority is underway), CAMERWA will be responsible for procuring all medicines, reagents and consumables from qualified vendors. All medicines and reagents will be procured from international sources, as there are no local vendors of the necessary items.

Procurement of ARV drugs (first and second line treatment), of drugs for OI prophylaxis and treatment, and of commodities to improve access to various family planning methods will be strengthened to ensure that there will be no stock outs for all these essential drugs and commodities. District pharmacies will be supported to achieve this result in all 30 districts. At the central level, CAMERWA will be strengthened to increase its storage capacity and to establish a functional active distribution system.

Once purchased, inventory is centralized in restricted-access CAMERWA storage facilities. Inventory management is computerized and carried out by a trained pharmacist. Eligibility of potential customers must be verified before release of medications or products is approved.

Throughout the public sector distribution chains, the program management unit will ensure that biweekly checks are conducted to verify that products are being stored according to technical standards, including appropriate humidity and temperature levels in the stockrooms, as well as to monitor that transfer pricing is being implemented in accordance with prices set by the PMU, TRAC and MOH. Moreover, the regular reporting by CAMERWA, and health districts will enable the program management unit to ensure that all commodities are moving through the supply chain in an efficient manner.

3.2—COMMUNITY SYSTEMS STRENGTHENING

The size and the diversity of the constituencies of the umbrella organizations are a challenge in terms of effective coordination of interventions. Most umbrellas have embarked in processes of decentralization to make sure that the coordination of their members starts at the district level but decentralized structures are still recent and therefore still lack experience. CSO members of each umbrella present in a district elect representatives to the CDLS who are mandated to facilitate communication between their organizations and other HIV actors present in the district. Together with the RRP+ coordinator who oversees the activities of the PLHIV's associations and cooperatives, there will therefore be in each district two agents whose role will be to strengthen the civil society response and ensure its effective coordination with other local actors.

In keeping with the diversity of situations described above, asymmetric support, adapted to each umbrella's reality, will be provided during this NSP to help them play their respective roles more efficiently. Institutional strengthening of umbrellas will also help them become more autonomous so that they can improve and scale up the technical support they should provide to their members. In the short term some of the umbrellas should be able to become principal recipients of international funding and manage large grants.

Community systems will be strengthened at two levels:

- CSO implementation; and
- civil society umbrella organizations coordinating the interventions of their constituencies.

The rationale for the strengthening of implementing CSOs is improved quality of interventions and adaptability to new innovative approaches through stronger technical programming skills, and sustainability of interventions through institutional development. Civil society umbrella organizations need to be strengthened institutionally so that in turn they can provide their member organizations with technical support on organizational issues and fully coordinate their constituencies. The emergence of strong national civil society champions is also essential to the sustainability of the national response to HIV by reducing progressively the dependence on international technical support from INGOs.

The strengthening of community systems will include the following elements:

- *Human resources*: Recruitment and retention of personnel: qualified personnel will be recruited by implementing CSOs and CS umbrella organizations at the central and district level based on the needs identified for each umbrella and cost-effectiveness criteria.
- *Training*: Training needs have been identified in general to strengthen both implementing CSOs and umbrella organizations in the following areas: planning, M&E, financial and program management systems, advocacy, and resource mobilization. However, capacity analysis and capacity development plans will be conducted

for each CSO umbrella in order to define exactly in which areas staff should be trained. Training materials will have to be updated.

- *Information systems*: This is described in the next chapter on M&E framework. The strengthening of information systems is particularly important for community organizations to improve bidirectional communication with local and national coordination structures, so that their interventions are better integrated in the national HIV response.

3.2.1—Community Systems Partnerships

In order to improve networking, sharing of experiences and lessons learned, and to strengthen the negotiation capacities of civil society, a Civil Society Umbrellas Consultative Committee on HIV/AIDS will be set up. Composed of the presidents and executive secretaries of the five civil society umbrella organizations and the Federation of the Private Sector, the consultative committee will represent umbrellas in discussions with the government and partners on HIV policies. It will be the civil society umbrellas' representative body for the oversight of the allocation of funds to civil society for the implementation of HIV activities in Rwanda.

An organization with proven experience in institutional development will be selected to provide technical support to civil society umbrellas during the first two years of this NSP.

4. FINANCING THE NATIONAL STRATEGIC PLAN

4.1—RESOURCE MOBILIZATION

HIV has received substantial and rapidly increasing levels of funding over the last few years. According to the 2006 National AIDS Spending Assessment (NASA), around 92% of all HIV funds came from international donors, whereas 5% came from government ministries and other public institutions, 2.2% from individual household expenditures, and 0.4% from the private sector, including corporations. Even though this very important proportion of funding by external sources represents a challenge in terms of sustainability, stability in the level of external funding is a compromise to ensure medium-term continuity in service provision. Unless the global economic crisis causes major reductions in the international donors' contribution, Rwanda expects to continue to benefit from similar levels of HIV funding over this whole NSP period.

4.2—GOVERNMENT CONTRIBUTION

Even though the percentage of the government's contribution to the overall HIV budget is quite small, there is a definite effort on its part to increase the proportion of the total GOR budget allocated to health. Although short of the target of 12% set in HSSP I for 2009, the percentage of total GOR budget for health has increased from 8.2% in 2005 to 9.1% in 2008, translating in a rise of per capita total health expenditure from U.S. $6 to U.S. $ 11, U.S. $5 short of the target of U.S. $16. As HIV represents over 60% of the GOR's health budget, this effort to increase the government's contribution also affects HIV funding.

4.3—KEY PARTNERS/FUNDERS

According to the 2006 NASA, the main international donors are the U.S. Presidential Emergency Plan for AIDS Relief (PEPFAR) (33%), Global Fund (15%) and World Bank MAP (13%). Other donors such as UN agencies and ADB should be mentioned even if their contribution is lower because they support coordination activities often neglected by the main donors. With the termination of MAP in 2008 and the ADB project in 2009, the major donors for the next NSP period will be PEPFAR and Global Fund. Even though PEPFAR precise funding is determined annually, for the purpose of the budget estimation, we have assumed that PEPFAR funding will remain stable around U.S. $120 million[9] per year for the next five years. As far as Global Fund is concerned, ongoing projects (Round 6 and 7) will run until the end of the NSP period.

A new perspective is presently under study for the HIV NSP to be used as basis for funding the national HIV/AIDS response. If put into effect, this new funding strategy will undoubtedly strengthen the coherence between national priorities and international support.

4.4—SUSTAINABILITY

Two major factors can influence the sustainability of interventions: one is the pertinence and relevance of the intervention, which depends on adequateness of methodology, adaptation to the needs of the beneficiaries, and participation of beneficiaries in the planning and monitoring/evaluation of these interventions, as well as in the implementation of some of the services that are delivered at the community level. The other is insurance of a stable source for the resources necessary to implement the intervention. This means not only financial resources, but also human and material resources such as medications and commodities, infrastructures, and equipment. A large proportion of health services, and specifically HIV services, are dependent on external funding.

At the community level most civil society organizations (CSOs) also depend on external funding, except for a majority of FBOs who can secure a large part of their funding from their religious constituencies. Community-based models are usually cost-effective because of the use of volunteers. The expansion of the number of cooperatives of PLWHA and affected people aims at securing the self-reliance and autonomy of those organizations through IGAs. However, community systems need to be strengthened to ensure the sustainability of the interventions implemented by CSOs. Volunteers and staff of CBOs, local and national NGOs need to be

9. The full amount of PEPFAR funding has not been counted against the HIV NSP. A share of resources used for administrative and overhead costs; in-country technical assistance; and health systems strengthening beyond HIV NSP goals have been excluded. See further explanations in Chapter 6 on Financing.

trained in various areas of organizational development such as project/program management and governance. They also need to have proper infrastructures and equipment. International NGOs play an important role in this process of strengthening the capacities of national and local organizations, with the objective that they can progressively take over interventions presently implemented by international partners.

It would be unrealistic to pretend that Rwanda alone can provide such volume of financial resources for the strengthening of both health systems and community systems. However, stability and regularity of this external financing can be secured through responsible and efficient management which elicit a relationship of trust and confidence between the Rwandan government and donors. The present perspective of basing future funding from major donors on national strategies such as this HIV NSP is undoubtedly a major step in the direction of ensuring sustainable financing for Rwanda's development.

4.5—RESOURCE ALLOCATION

4.5.1—Funding Channels

Each donor has its own funding mechanism, although they are all requested to respect national priorities and procedures in their planning and resource provision. The government funds are transferred to decentralized coordination and implementing institutions through the MoH financial management system. At the district level, these funds are managed by the district health director and by the district finance department. For Global Fund projects, a project management unit under the supervision of CNLS is responsible for the management of all Global Fund projects. The principal recipient for all Global Fund projects is the MoH, so that funds are mostly directed through public channels. For PEPFAR, funding mechanisms are controlled by the United States Government and directed to national public institutions and U.S. NGOs implementing the program. Various community-based and faith-based organizations are also beneficiaries as sub-recipients. Priorities for PEPFAR are coordinated at the central level.

4.5.2—Allocation Mechanisms

With the rapid increase in funding volume over the last few years, care and treatment has progressively taken a larger proportion of funds, whereas prevention has maintained itself and impact mitigation's share has slightly diminished. The absolute amount of funds for each of these sectors has however increased. With the increase in number of patients under treatment, this trend is likely to continue, especially with an expected rise in the number of patients who need more expensive second-line treatment.

This brings us to another aspect of funds allocation mechanisms that will be adjusted during this NSP period, the prioritization of interventions with most-at-risk populations (MARPs). Without neglecting efforts targeting the general population, a larger proportion of funds will be directed towards groups that have been identified through evidence-based exercises as those are where most new infections appear and where interventions are most likely to have marked impact for reduction of new infections. One of the conditions to ensure proper allocation of funds to different community groups is to channel funds in adequate amounts to civil society and private sector organizations that are targeting marginalized groups that are often not reached by regular public services oriented towards the general population.

An important preoccupation, and a responsibility of central coordinating bodies, is to control as much as possible that funds are distributed equitably among all geographic areas. There is presently a tendency to give a disproportionate part of funds to easily accessible districts, where most of the development partners are working, whereas more isolated districts are neglected both in terms of implementing partners and of volume of funds available. Improvement in planning and monitoring mechanisms will enable central coordinating bodies to ensure correction of this inequity.

4.5.3—Financial Audits

Financial audits are performed regularly (on a yearly basis) to verify that spending mechanisms follow national and international regulations. The main institutions for coordination and implementation of the HIV response have internal auditors, and they also undergo yearly external audits with recognized auditing firms. The direction of Administration and Finance of these institutions are responsible to ensure that procurement and tender regulations are strictly followed for all purchases and management of activities according to the yearly work plan and to the government's requirements.

To track HIV-related expenditure in a calendar year, Rwanda uses the National AIDS Spending Assessment

(NASA) and the HIV/AIDS sub-account of the National Health Account (NHA). The subaccounts preserve the distinction between health and non-health expenditures. The NASA approach aims to inform a multisectoral HIV perspective. The data collection approach involves the following: 1) Access original expenditure records from institutions; 2) Examine other secondary data and ongoing surveys; and 3) Develop and implement targeted questionnaires for donors, NGOs, private and public employers/corporations, and insurance companies. Both NHA and NASA reflect actual expenditures associated with the delivery of a service or product that differentiates commitments and disbursements.

Efforts are being made to integrate the needs for HIV expenditure information into existing routine data collection in the country, in particular the information on expenditure by stakeholders that is captured by the database CNLSnet. Over time, the routine data collection system will replace other surveys on HIV expenditure.

PART
4

Costing of the NSP

1. COSTING THE NSP

1.1—METHODOLOGY

The costing of the NSP was carried out according to the Result-Based Framework described, according to the three impacts described in Section 2 (related respectively to prevention, care and treatment, and impact mitigation) and the two cross-cutting areas: the institutional coordination framework described in Section 3 and the results framework for Monitoring and Evaluation in Section 4. The general strategy of the plan is described in these sections and a number of activities were defined. It is at the activity level that the costing was carried out. The cost of each activity was estimated using a standardized framework involving two sets of assumptions: Unit Cost Variables and Quantitative Assumptions. Both sets of assumptions for all activities are linked to a single costing model to ensure consistency, transparency, and reproducibility of the costing process.

1.1.1—Unit Cost Variables

In order to ensure that the costing was as accurate and uniform as possible, the unit cost of individual items and activities were estimated. Costs for items such as salaries, drugs and consumables, infrastructure, and equipment were drawn directly from the budgets of relevant MOH institutions and civil society organizations. Other unit costs were estimated through expert consultation with relevant actors and verified by multiple sources.[11]

1.1.2—Quantitative Assumptions

To estimate the full cost of each activity, the unit cost was multiplied by an objective, predetermined quantitative assumption. Where appropriate, program targets were used to estimate the costs over the years. Demographic assumptions were made using data from the Rwandan National Institute of Statistics, the 2008 interim DHS, and other sources. Epidemiologic assumptions were drawn predominantly from the CNLS/TRAC/MOH. The latest epidemiological estimates (from EPP/SPECTRUM) were used to develop care and treatment cost estimates.

Assumptions regarding staffing, facilities and infrastructure, and clinical activities were based upon the strategic plans of relevant MoH agencies, civil society organizations and implementing partners. Whenever possible, rather than estimating costs using these assumptions, financial data were drawn directly from institutional budgets to ensure the costing was aligned directly with real expenditures.

1.1.3—Cost Categorization

Each activity was categorized along several dimensions.

Level of Intervention—Community-based interventions vs. Ministry of Health, National Health Institutions and Health facilities: The Community-based intervention activities are those principally implemented at the community level. This category is subdivided into Civil Society Organizations, Private Sector, other EDPRS sectors, and Community Health Workers. The other category captures what the National Health Institutions, the MoH and, most importantly, the Health Facilities at all levels will implement.

Cost Type—Investments vs Operational Costs: Investment costs are one-time costs, mainly related to infrastructure and equipment, but also including certain trainings such as training of trainers, surveys and research, etc. Operational costs are recurrent costs necessary to ensure the on-going functioning of activities and programmes such as human resources, drugs and commodities, etc.

Cost Category: Inputs for each activity were also broken down into the following cost categories, in line with the Health Sector Strategic Plan:

- *Drugs, Commodities and Consumables*: All drugs, commodities, and lab consumables.
- *Human Resources*: Healthcare workers, MoH and national institutions staff, secondments to the MOH, district positions and other incentives offered to personnel.
- *Infrastructure*: Investment in, rehabilitation of and maintenance of medical facilities, and other buildings/offices such as labs, pharmacies, etc.
- *Medical Equipment*: Investment, maintenance, spare parts of medical equipment.
- *Administrative Equipment (e.g., ICT)*: Investment, computer maintenance, internet connection, etc.

11. Drugs and consumables, the largest line items, were taken from the most recent national HIV/AIDS quantification performed by the Coordinated Procurement and Distribution System.

- *Training*: Workshops, onsite training, offsite training, mentoring.
- *Nutritional Support*: Nutritional, therapeutic feeding (infants, malnourished patients), basic food packages, inpatient feeding, demonstration kitchens.
- *Running Costs—fuel, electricity, communication, office supplies*: Maintenance/running costs of existing facilities (except infrastructure, medical, IT, and vehicles), e.g., generators, travel costs.
- *CHW Support*: All investment or operational costs to support community health worker system (training, compensation, equipment, support to cooperatives, or community PBF).
- *Protocol Development/IEC material*: Includes activities such as the development of guidelines, protocols, policies, IEC material, etc.
- *Research/Studies/Surveys*: Specific clinical or operational research, studies and surveys to be conducted.
- *Socio-economic Assistance*: Socio-economic support to vulnerable populations, including OVCs (e.g., housing, schooling, etc.).

Given the level of details involved, and the complex nature of any such costing exercise, the costing remains an estimate and will continue to be refined as the NSP is translated into operational plans.

1.2—PRESENTATION OF THE NSP COSTING

The following section summarizes the main costing data. It presents the costs in a number of different ways; further break-downs and more detailed views can be seen in the annexed costing file. The total cost estimate for the NSP in Fiscal Year 2009/2010 is U.S. $206 million increasing to about U.S. $263 million by 2012/2013. Over the full life of the NSP, an estimated total of U.S. $934 million will be necessary to successfully reach our targets.

Table 44 presents these costs as classified by impact result. Care and treatment makes up the largest share of the estimate, representing 35% of the total cost, driven largely by ARVs, OI drugs, and laboratory reagents and consumables. Prevention makes up a third of all costs, at 31%.[12] The largest prevention costs relate to the capacity building and support for civil society implementing organizations, community health workers, male circumcision, VCT and PMTCT programs. Impact mitigation accounts for 19% of all resource needs, primarily

12. HIV testing is more closely related to achieving treatment results rather than prevention results, and this plan reflects this shift in approach. However, because testing activities are rolled out alongside other prevention strategies, from a costing and operational perspective, we have opted to cost testing as a component of prevention.

Table 43—Overall Cost by Type (U.S. $ million)

Type	2009/2010	2010/2011	2011/2012	2012/2013	Total	%
Investments	39.9	35.1	38.3	41.7	155.0	17%
Operational	166.2	187.0	204.9	221.3	779.4	83%
Total	**206.1**	**222.1**	**243.2**	**263.0**	**934.4**	**100%**

Table 44—Cost by Impact Result (U.S. $ million)

Impact Result	2009/2010	2010/2011	2011/2012	2012/2013	Total	%
1. The incidence of HIV in the general population is reduced by half by 2012	68.0	69.5	73.8	79.7	291.1	31%
2. Morbidity and Mortality among people living with HIV are reduced by 2012	71.1	77.1	84.8	94.5	327.5	35%
3. Persons infected and/or affected by HIV/AIDS have equal opportunities	37.0	41.0	47.8	52.5	178.3	19%
4. Strengthen the coordination institutions at central and decentralised level	18.2	19.9	20.0	20.3	78.4	8%
5. M&E, Data, and Research	11.8	14.6	16.8	15.9	59.0	6%
Total	**206.1**	**222.1**	**243.2**	**263.0**	**934.3**	**100%**

providing a minimum package of services for OVCs and supporting cooperatives and income generating activities supporting people infected or affected by HIV/AIDS. Institutional coordination and monitoring and evaluation comprise 8% and 6% respectively of the total budget. In terms of the levels of implementation, the MoH, national health institutions, and health facilities (including Faith-Based Health Centres, which account for 40% of health facilities) are responsible for the slightly over the majority (55%) of activity costs, while the remaining 45% of the total estimated costs will be under the responsibility of civil society implementers, private sector, and non-health ministries (Table 45).

Figure 11 presents estimated 2009 costs as classified by cost category. The largest cost category is for drugs, commodities and consumables, which represent 24% of first year costs. This category is driven primarily by the cost of antiretroviral drugs, laboratory reagents and consumables, circumcision, and medications for other treatments. Human resources also represent a significant share of total costs, at 19%, driven by salaries for front-line health professional and staff of national health institutions as well as by performance-based financing for HIV-related health providers. Nutritional support is also key and includes both food packages for vulnerable patients as well as support programs such as community gardens, agricultural inputs, etc.

Infrastructure costs, which comprise 9% of estimated costs in 2009, are driven primarily by the expansion of testing, PMTCT and ART sites. Socio-economic assistance, at 8%, is driven by the OVC support package. Another important cost relates to community health workers (8%), over 80% of which represents performance-based financing for approximately 45,000 community health workers (CHW). This assumes each CHW, through his/her cooperative, could potentially earn approximately U.S. $25 per month. Running costs are made up principally of costs to maintain the functioning of health facilities, national institutions, civil society organizations, fuel for transport, etc. Training amounts to 6% of total costs.

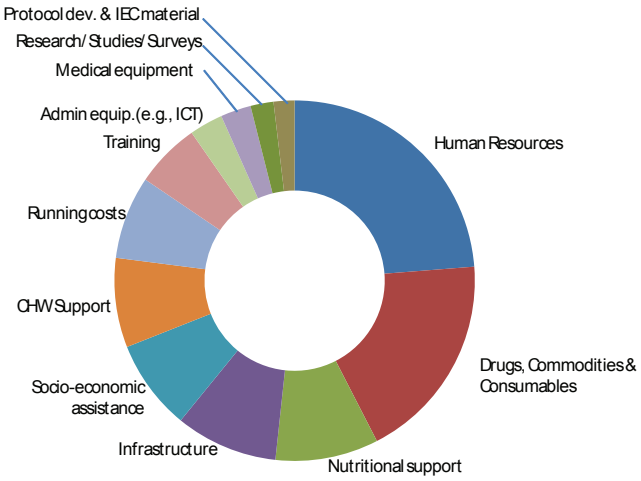

Figure 11: Costing by cost category, 2009, 100% = US$ 206 million

Table 46 on the next page shows the cost break-down by outcome. It shows clearly that reducing sexual transmission (1.1) and increasing antiretroviral treatments (2.2) are the biggest cost drivers, in line with the country's priorities. The third largest driver relates to impact mitigation (3.2), in particular in support of OVCs; M&E makes up 8% of total costs. While this table captures all the direct M&E costs, it does not include activities such as formative supervisions, which are tied to the specific relevant activities. Coordination accounts for approximately 6% of the total needs. While this is a significant portion of the budget, it is a critical ingredient for a successful response to HIV. It includes support for the coordinating bodies in the response against HIV, such as the CNLS and other specialized agencies.

Table 45: Cost by Level of Intervention (U.S. $ million)

Level of Intervention	2009/2010	2010/2011	2011/2012	2012/2013	Total	%
Ministry of Health, National Health Institutions and Health Facilities	**110.5**	**120.7**	**135.0**	**149.1**	**515.4**	**55.2%**
Community-Based Interventions	**95.6**	**101.3**	**108.2**	**113.9**	**419.0**	**44.8%**
Civil Society Implementers	55.0	59.8	62.7	65.3	242.9	26.0%
Community Health Workers	22.9	23.5	24.1	24.5	95.0	10.2%
Non-Health Sector	17.0	17.4	20.7	23.4	78.5	8.4%
Private Sector	0.7	0.6	0.7	0.6	2.7	0.3%
Total	**206.1**	**222.1**	**243.2**	**263.0**	**934.4**	**100%**

Table 46: Cost by Impact and Outcomes (U.S. $ million)

Impact and Outcomes	2009/10	2010/11	2011/12	2012/13	Total	%
1. The incidence of HIV in the general population is reduced by half by 2012	**68.0**	**69.5**	**73.8**	**79.7**	**291.1**	**31%**
1.1. Reduced sexual transmission of HIV	46.3	49.5	53.1	58.1	207.0	22%
1.2. Reduced mother-to-child transmission of HIV	16.6	15.0	15.6	16.5	63.7	7%
1.3. Maintenance of low levels of blood-borne transmission of HIV	5.2	5.0	5.1	5.1	20.4	2%
2. Morbidity and mortality among people living with HIV are reduced	**71.1**	**77.1**	**84.8**	**94.5**	**327.5**	**35%**
2.1. People living with HIV systematically receive OI prophylaxis, treatment, and other coinfection treatments	11.4	12.0	12.3	12.9	48.6	5%
2.2. People living with HIV eligible for ART receive it	53.3	57.4	63.4	70.9	245.1	26%
2.3. People living with HIV receive care and support according to needs	6.4	7.7	9.0	10.7	33.8	4%
3. Persons infected/affected by HIV/AIDS have equal opportunities	**37.0**	**41.0**	**47.8**	**52.5**	**178.3**	**19%**
3.1. People infected/affected by HIV (including child-headed households) have improved economic opportunites and social protection	10.2	4.9	4.9	5.0	25.0	3%
3.2. Social and economic protection are ensured for orphans and vulnerable children	25.8	35.1	41.8	46.5	149.3	16%
3.3. Reduction of stigma and discrimination of PLHA and OVC in the community	1.1	1.0	1.1	1.0	4.2	0%
4. M&E, Data, and Research	**18.2**	**19.9**	**20.0**	**20.3**	**78.4**	**8%**
5. Strengthen the coordination institutions at the central and decentralized level	**11.8**	**14.6**	**16.8**	**15.9**	**59.0**	**6%**
Total	**206.1**	**222.1**	**243.2**	**263.0**	**934.4**	**100%**

2. GAP ANALYSIS

2.1—METHODOLOGY

The gap analysis was carried out once the full costing exercise was completed. The analysis was carried out at the outcome level. Estimates of total available resources were derived from two sources: the budgets for currently active Global Fund proposals and the 2009/2010 Health Sector Joint Annual Work Plans.

For the Global Fund, the budgets of the two active Global Fund approved proposals (Round 6 and Round 7) were incorporated into the analysis. Each Service Delivery Area (SDA) was analyzed to match with Outcomes of the NSP. Because the RCC has not yet been approved, it is not included in this analysis. Should it be approved, a large share of the care and treatment gap would be covered.

For all other sources, the Joint Annual Work Plan was used. PEPFAR funded organizations, the UN, the World Bank, and other donors, as well as bilateral agencies and implementing NGOs that contribute to the health sector all submit Joint Annual Work Plans to the government. All partners were asked to specify which output each of their respective HIV-related activities contribute to. All activities in the Joint Annual Work Plan were reviewed and categorized along the different outcomes in the strategic framework of the NSP. Only activities deemed directly relevant to the results of the NSP were included.

As such, overhead of external partners was excluded from the analysis. Similarly, because the costing did not factor in long-term in-country technical assistance from external partners, this source of support was not fully included as part of the available resources. A factor of 30% was used on most activities labelled as in-country technical assistance. In some cases, activities were split between several outcomes; in other cases, only a share of an activity was considered to contribute to the NSP. For each outcome, the funding gap was calculated by subtracting the sum of all estimated funds available from the cost, as determined in the costing exercise.

Accurately assessing the gap over the full five-year span of the NSP requires consideration of potential variation in revenue sources over time. Thus, the overall funding gap was calculated within the context of three different funding scenarios. These are similar to the scenarios used for the Health Sector Strategic Plan costing. Unless otherwise specified, the first scenario is used in the tables to follow, as it remains the most realistic. Because resources available from the Global Fund are known for the coming years, these were taken as is and the growth assumptions were not applied to Global Fund resources.

2.2 – RESULTS

In total, an estimated U.S. $136 million is available to finance the NSP in year one. As shown in Table 48, a gap of U.S. $70.5 million remains in order to reach the target estimated cost of U.S. $206 million. Table 48 shows how this gap evolves under the three scenarios described above. Because it is believed to be more realistic, all subsequent gap analyses assume Scenario 1 conditions. Therefore, assuming that external support remains constant and government funding increases at the current rate, the total funding gap for the life of the NSP is U.S. $425 million.

Table 47

Scenario	Government Budget	External support
"As is"	Government health budget increases at same rate as overall budget (~9% per year)	Remains at current levels
Moderate growth	Share of Health Sector budget increases to 12% of total GOR budget by 2012 (implies a 18% year-on-year growth)	Increases by 5% per year
High growth	Share of Health Sector budget increases to reach 15% of total GOR budget by 2012—the "Abuja" commitment (implies a 27% year-on-year growth)	Increases by 25% per year

Table 49 shows the sources of funding that make up the total estimated resources available. The largest contributors are PEPFAR[13] and the Global Fund.[14] Once approved, Global Fund resources are relatively predictable whereas PEPFAR budgets are re-negotiated every year.

Table 50, on the next page, shows the resource gap broken down by impact and outcome. It shows that the outcome related to the provision of ART has one of the smallest gap, despite needing a significant amount of resources. This reflects the country's success in mobilizing resources to rapidly scale-up ART through the Common Procurement Distribution System. The gap in subsequent years highlights the needs to continue mobilizing resources to maintain and further expand care and treatment, in particular as some sources of financing such as UNITAID come to closure and as Rwanda seeks to provide treatment to patients earlier in the course of their disease. The largest gaps are in prevention. This is driven by a series of new initiatives to increase prevention efforts such as male circumcision and increased STI treatment. As mentioned throughout this plan, civil society plays a crucial role in the fight against HIV/AIDS, particularly in prevention. Yet, as underlined by the previous tables, these efforts remain under-funded today. While Rwanda's M&E system is strong, the countries aggressive research and e-health agenda creates a significant funding requirement.

Despite Rwanda's tremendous efforts in the fight against HIV/AIDS, and despite the already significant support it receives, much remains to be done as it shifts its attention from quantity to quality. The NSP has ambitious targets, but the costing and gap analysis show that they are both reasonable and within reach. Further refinements to the designed activities and their costing estimates will need to be made as we move towards implementation.

13. The PEPFAR annual budget for Rwanda totals about U.S. $122 a year. However, not all these resources were applied to the NSP (for the same reasons that other partners' resources were not all included). This is because a share of the total resources represents: 1) Overhead and administrative costs (about U.S. $20 million); 2) Technical assistance beyond what is costed in the NSP (about U.S. $15 million); and 3) The broader health system support (about U.S. $20 million).
14. Figures here include Global Fund Round 6 and 7 and a R3 extension. RCC R3 has not been included since it is still in the review process.

Table 48: Estimated Funding Gap for NSP by Scenario (U.S. $ million)

Overall gap analysis	2009/10	2010/11	2011/12	2012/13	Total	Relative total gap
Resource Needs	**206.1**	**222.1**	**243.2**	**263.0**	**934.4**	
Estimated Resources Available Scenarios						
Scenario 1	135.7	126.6	124.9	122.5	509.6	
Scenario 2	135.7	131.8	135.8	139.8	543.0	
Scenario 3	135.7	148.8	175.0	207.9	667.3	
Financing Gap Under Scenario 1	**70.5**	**95.4**	**118.4**	**140.5**	**424.7**	**45%**
Financing Gap Under Scenario 2	**70.5**	**90.3**	**107.4**	**123.2**	**391.4**	**42%**
Financing Gap Under Scenario 3	**70.5**	**73.3**	**68.2**	**55.1**	**267.1**	**29%**

Table 49: Estimated Funding Gap for NSP Under Scenario 1, Showing Funding Sources

Overall gap analysis (U.S. $ million)	2009/10	2010/11	2011/12	2012/13	Total	%
Resource Needs	**206.1**	**222.1**	**243.2**	**263.0**	**934.4**	
Estimated Resources Available (Scenario 1)	**135.7**	**126.6**	**124.9**	**122.5**	**509.6**	**100%**
Government of Rwanda	14.1	15.3	16.7	18.2	64.3	13%
US Government/PEPFAR	67.6	67.6	67.6	67.6	270.2	53%
Global Fund to Fight AIDS, TB and Malaria	43.1	32.8	29.7	25.8	131.5	26%
Other external sources	6.6	6.6	6.6	6.6	26.5	5%
United Nations Family	4.3	4.3	4.3	4.3	17.1	3%
Financing Gap	**70.5**	**95.4**	**118.4**	**140.5**	**424.7**	
Gap as % of need	**34%**	**43%**	**49%**	**53%**	**45%**	

Table 50: Estimated Funding Gap for NSP Broken by Impact and Outcome

Impact and Outcomes	2009/10	2010/11	2011/12	2012/13	Total	Relative total gap
1. The incidence of HIV in the general population is reduced by half by 2012						
1.1. Reduced sexual transmission of HIV						
Resource Needs	46.3	49.5	53.1	58.1	207.0	
Resources Available	20.8	19.2	18.9	18.6	77.5	
Financing Gap	25.5	30.4	34.2	39.5	129.5	63%
1.2. Reduced mother-to-child transmission of HIV						
Resource Needs	16.6	15.0	15.6	16.5	63.7	
Resources Available	8.3	7.0	6.6	6.1	27.9	
Financing Gap	8.3	8.0	9.0	10.4	35.7	56%
1.3. Maintenance of low levels of blood-borne transmission of HIV						
Resource Needs	5.2	5.0	5.1	5.1	20.4	
Resources Available	1.2	1.2	1.2	1.2	4.9	
Financing Gap	4.0	3.8	3.9	3.9	15.5	76%
Impact 1 Total Gap	***37.7***	***42.1***	***47.1***	***53.8***	***180.7***	***62%***
2. Morbidity and mortality among people living with HIV are reduced						
2.1. People living with HIV systematically receive OI prophylaxis, treatment, and other coinfection treatments						
Resource Needs	11.4	12.0	12.3	12.9	48.6	
Resources Available	10.0	8.3	7.8	7.3	33.3	
Financing Gap	1.4	3.7	4.5	5.6	15.3	31%
2.2. People living with HIV eligible for ART receive it						
Resource Needs	53.3	57.4	63.4	70.9	245.1	
Resources Available	41.2	39.3	39.1	38.9	158.5	
Financing Gap	12.1	18.1	24.3	32.1	86.6	35%
2.3. People living with HIV receive care and support according to needs						
Resource Needs	6.4	7.7	9.0	10.7	33.8	
Resources Available	3.7	3.7	3.7	3.7	14.7	
Financing Gap	2.7	4.0	5.4	7.0	19.1	57%
Impact 2 Total Gap	***16.2***	***25.9***	***34.2***	***44.7***	***121.0***	***37%***
3. Persons infected/affected by HIV/AIDS have equal opportunities						
3.1. People infected/affected by HIV (including child-headed households) have improved economic opportunites and social protection						
Resource Needs	10.2	4.9	4.9	5.0	25.0	
Resources Available	2.2	2.2	2.2	2.2	8.9	
Financing Gap	8.0	2.7	2.7	2.8	16.1	65%
3.2. Social and economic protection are ensured for orphans and vulnerable children						
Resource Needs	25.8	35.1	41.8	46.5	149.3	
Resources Available	16.7	16.4	16.3	16.2	65.5	
Financing Gap	9.1	18.8	25.6	30.4	83.8	56%
3.3. Reduction of stigma and discrimination of PLHA and OVC in the community						
Resource Needs	1.1	1.0	1.1	1.0	4.2	
Resources Available	0.4	0.4	0.4	0.4	1.6	
Financing Gap	0.7	0.6	0.7	0.6	2.4	60%
Impact 3 Total Gap	***17.7***	***22.0***	***28.9***	***33.7***	***102.4***	***57%***

Impact and Outcomes	2009/10	2010/11	2011/12	2012/13	Total	Relative total gap
4. Strengthen the coordination institutions at the central and decentralized levels						
Resource Needs	18.2	19.9	20.0	20.3	78.4	
Resources Available	17.9	16.2	15.8	15.3	65.2	
Financing Gap	0.3	3.8	4.2	5.0	13.3	17%
5. M&E, Data, and Research						
Resource Needs	11.8	14.6	16.8	15.9	59.0	
Resources Available	9.1	8.8	8.7	8.6	35.1	
Financing Gap	2.7	5.8	8.1	7.3	23.9	40%
Coordination and M&E Total Gap	***3.0***	***9.6***	***12.3***	***12.3***	***37.2***	***27%***
Unallocated Resources from USG	4.1	4.1	4.1	4.1	16.6	
TOTAL GAP	**70.5**	**95.4**	**118.4**	**140.5**	**424.7**	**45%**

PART
5

National M&E Plan on HIV/AIDS

1. INTRODUCTION

1.1—PURPOSE OF NATIONAL M&E PLAN ON HIV/AIDS

As the government of Rwanda continues to implement and scale up comprehensive HIV prevention, care and support interventions for its population, it is becoming increasingly crucial to develop a strong evidence base for planning and programming purposes. This includes understanding the dynamics of the HIV epidemic, including the sub-groups and other determinants driving the transmission of new infections; and gathering objective evidence on interventions that effectively and efficiently contribute to achieving the national targets of preventing new infections and improving the quality of life of people living with HIV. This evidence base should influence planning, resource mobilization and allocation, and the prioritization and targeting of population groups and related interventions.

With national and international donors, development partners, communities and other stakeholders contributing to the overall HIV response at various levels and sectors in Rwanda, it is necessary to develop a national M&E system that can achieve the following functions:

- accurately assess the degree to which interventions are contributing to the achievement of national HIV targets;
- consistently monitor trends in HIV incidence, prevalence, and related behaviors in the population; and
- consistently monitor trends in HIV service delivery.

The system must meet the data collection, analysis and reporting needs of the Government of Rwanda and focus on increasing the availability of routine information to stakeholders at all levels to promote evidence-based decision making. This M&E Plan outlines the strategies that will be implemented from 2009 to 2012 in order to develop a fully functional HIV M&E System that meets the data and information needs of all stakeholders at all levels.

1.2—M&E CONCEPTS AND TERMS

As several stakeholders are involved in monitoring and evaluation activities at varying levels, it is important that all stakeholders have the same understanding and definition of basic monitoring and evaluation terms. The following summary, excerpted from the UNAIDS Draft Strategic Guidance for Program Managers on the Evaluation of HIV Prevention Programs (October 2009), will serve as the common language for this plan:

M&E in the HIV response includes many different components, methods and activities, but in general can be defined as acquiring, analyzing and making use of relevant, accurate, timely, and affordable information from multiple sources for the purpose of program improvement. M&E is the cornerstone of an evidence-based approach to the decision making required for designing and implementing effective HIV prevention, treatment and care programs. M&E activities are inextricably linked but differ in purpose and design.

Monitoring provides information on where a policy, program or project is at any given time. It can provide a "snapshot" of the situation or program status. Evaluation provides information on whether or not specific programs or interventions are "working" (i.e., achieving intended objectives or targets) and why objectives or targets are or are not achieved. Evaluation complements monitoring: when a monitoring system observes that program efforts are off track, then good evaluative information can help clarify the realities and trends noted (Zall Kusek and Rist, 2004).

Precise definitions of monitoring, evaluation and other related terms are provided below. The definitions are excerpted from the UNAIDS Glossary of Monitoring and Evaluation Terms (Geneva: UNAIDS, 2008c) and are considered the official definitions used by all HIV stakeholders in Rwanda.

Monitoring is the routine tracking and reporting of priority information about a program/project, its inputs and intended outputs, outcomes and impacts. Input and output monitoring refers to the tracking of information about program/intervention inputs and program/intervention outputs; whereas outcome monitoring refers to the tracking of variables that have been adopted as valid and reliable measures of the desired program/intervention outcomes. Outcome monitoring doesn't infer causality; changes in outcomes may be attributable to multiple factors, not just a specified

program/intervention. Impact monitoring is the tracking of health-related events, such as the prevalence or incidence of a particular disease; in the field of public health, impact monitoring is usually referred to as "surveillance".

Evaluation is the rigorous, scientifically-based collection and analysis of information about program/intervention activities, characteristics, and outcomes that determine the merit or worth of the program/intervention.

Process evaluation is a type of evaluation that focuses on program/intervention implementation, including, but not limited to access to services, whether services reached the intended population, how services are delivered, and perceptions about needs and services, management practices.

Outcome evaluation is a type of evaluation that determines if, and by how much, intervention activities or services achieved their intended outcomes. An outcome evaluation attempts to attribute observed changes to the intervention tested.

Impact evaluation is a type of evaluation that assesses the rise and fall of impacts, such as disease prevalence or incidence, as a function of HIV programs/interventions.

The NSP 2009-12 has an overall result to be achieved during its implementation period. Resources are used to implement different interventions that are expected to produce desired results which over time contribute to achieving the overall collective result. An effective M&E system establishes a clear and logical pathway from the resources used to the achievement of the overall result. This pathway includes the following major components:

- *Inputs*: the financial, human, material, technological, and information resources used in a program/intervention;
- *Activities*: actions taken or work performed through which inputs, such as funds, technical assistance, and other types of resources are mobilized to produce specific results;
- *Interventions*: a specific activity or set of activities intended to bring about change in some aspect(s) of the status of the target population;
- *Outputs*: the results of program/intervention activities; the direct products or deliverables of program/intervention activities;
- *Outcomes*: the short-term and medium-term effects of an intervention's outputs, such as change in knowledge, attitudes, beliefs, and behaviors;
- *Impact*: the long-term, cumulative effect of programs/interventions over time on what they ultimately aim to change, such as a change in HIV infection, AIDS-related morbidity and mortality;
- *Indicators*: quantitative or qualitative variables that allow the verification of changes produced by a program/intervention relative to what was planned.
- *Target*: reference point or standard against which progress or achievements can be assessed.

2. DEVELOPMENT OF THE NATIONAL M&E PLAN ON HIV/AIDS 2009–2012

The National M&E Plan on HIV/AIDS 2009–2012 describes the current HIV M&E system that exists, and then further outlines new and innovative strategies necessary for achieving the purposes of the M&E plan as described in Section 1.1. The development of this M&E Plan adhered to the guiding principles of functional M&E systems proposed by the international community, and employed a participatory process engaging all HIV M&E Stakeholders at both the national and district levels. This narrative document was widely distributed to all HIV M&E stakeholders in October 2009 for input and validation.

Key strategic areas in the M&E system were discussed in detail in a participatory workshop with the membership of the Planning, Monitoring and Evaluation Technical Working Group (PM&E TWG) on HIV and AIDS in November 2009 in order to gain further input from stakeholders. The products of all of these activities are presented in this final plan. This section details the different steps involved in the development of this final M&E plan and the principles that guided its development.

2.1—MEASURING ACHIEVEMENTS TOWARDS NATIONAL HIV TARGETS & MONITORING TRENDS IN HIV INCIDENCE, PREVALENCE, AND RELATED BEHAVIORS: A LIST OF NATIONALLY AGREED COMMON INDICATORS

The first step in the development of the M&E Plan was the development of the National Strategic Plan (NSP) on HIV and AIDS 2009–2012. The NSP, which describes the national HIV response for the period 2009–2012, was developed using a results-based methodology and included in-depth research and analysis of the epidemiology of HIV in Rwanda, the achievements of the response to date, the capacities of the wide range of actors and implementation systems involved in the response, and the most promising evidence of effective interventions from Rwanda and beyond. These analyses fed into the process of NSP development, carried out during the first quarter of 2009 with the involvement of stakeholders from all sectors and from all over Rwanda.

The overarching results that the NSP will achieve by 2012 are as follows:

1. The incidence of HIV in the general population is halved by 2012;
2. Morbidity and mortality among people living with HIV are reduced; and
3. People infected and affected by HIV have the same opportunities as the general population.

The NSP presents a results framework for each overarching result, or impact result, which describes the causal logic and results chain developed for the achievement of each overarching result (See Annex A). Results are organized into three levels: output-level results, outcome-level results (including intermediate outcomes), and impact-level results. The achievement of short-term output-level results will lead to the achievement of mid-term outcome-level results, which will ultimately lead to the achievement of the long-term impact-level results, or overarching results.

During NSP development, indicators were assigned for each result level in the NSP, with the most recent baselines available, and target results provided for each indicator. These indicators constitute the list of common national indicators (See Section 4). The list of national indicators was developed with the contribution of all main stakeholders at the same time as the results framework for the entire NSP. The indicators are coherent with key national indicators, namely EDPRS and the Health Sector Strategic Plan (HSSPII). Additionally, the list refers to the most recent international guidelines (MERG Indicator Registry) and includes a key subset of indicators from MDG, UNGASS, PEPFAR, Global Fund, and Universal Access Indicators. This M&E Plan outlines how these national indicators will be measured to demonstrate the achievement of NSP impact results.

2.2—MONITORING TRENDS IN HIV SERVICE DELIVERY: PROGRAM-LEVEL INDICATORS

The NSP also presents strategies for the achievement of each output-level result at the program level, or HIV service delivery level. All HIV services must be

delivered in a quality-assured manner, target the appropriate population, and ultimately contribute to the achievement of NSP output-level results in accordance with the NSP results framework. For each output-level result in the NSP, a list of program-level indicators was developed to measure progress in the delivery of quality HIV services that contribute to the output-level results in the NSP (See Section 4). The list of indicators was developed with the contribution of all main stakeholders and is coherent with current program-level indicators already being collected by implementing partners from EDPRS sectors, Global Fund and PEPFAR. Each indicator includes national targets for each implementation year of the NSP to guide program planning at the service delivery level. This M&E Plan outlines how these program-level indicators will be measured to demonstrate the achievement of NSP output results.

2.3—PARTICIPATORY APPROACH TO M&E SYSTEMS STRENGTHENING

The participatory approach used in developing nationally agreed HIV targets and a common list of indicators through the NSP development process frames the entire M&E system. In addition to this process, the development of strategies for strengthening the M&E system itself, which will ultimately contribute to the quality measurement of all HIV targets, employed a participatory approach and methodology, achieving a strong level of participation of HIV M&E stakeholders at all levels and ensuring their commitment to the successful implementation of the plan.

The process started at the end of 2007 when the CNLS collaborated with the Global Fund, the World Bank Global AIDS M&E Team (WB/GAMET), UNAIDS, and MEASURE Evaluation to assess the functioning of the national M&E system. The CNLS used two assessment tools: the M&E Systems Strengthening Tool (MESST) and the MERG's draft assessment tool for the 12 components of a functional national M&E system. The assessment, a participatory workshop with key stakeholders, used checklists to identify strengths and weaknesses and suggest key action steps for improvement of the national M&E system at the national and sub-national levels. In 2008, M&E stakeholders began implementing the systems strengthening strategies.

In May 2009 during a National Strategic Plan (NSP) Operational Planning Workshop, HIV M&E stakeholders came together to further define strategies for M&E systems strengthening, by reviewing the ongoing M&E systems strengthening strategies being implemented since 2008, and developing new strategies necessary to measure the national HIV indicators included in the new NSP on HIV and AIDS 2009–2012. These ongoing and new strategies for M&E systems strengthening are described in detail in this M&E Plan.

2.4—OTHER GUIDING PRINCIPLES

The overarching principles that guided the development of this M&E Plan were full alignment to the NSP and NSP Results Framework, and a commitment to M&E systems strengthening. The principles were employed through the development of a list of common indicators both at the national and service delivery level to measure progress over time, and the routine development of M&E systems strengthening plans. In addition to these overarching principles, the components of the M&E system outlined in this plan were equally guided by other major concepts and principles recommended for the development of a fully functional M&E system by the international community. These principles are briefly presented in this section.

2.4.1—Integrated Planning, Coordination, Monitoring and Evaluation (PCM&E)

The overall HIV response in Rwanda employs integrated planning, coordination, and monitoring and evaluation functions at all levels. As the ultimate goal of the M&E system is to produce reliable and quality data to be used to influence program planning, it is widely accepted that these functions should be fully integrated and complimentary. Staff responsible for planning, monitoring and evaluation work closely together and these tasks are seen as part of a complete package, rather than as independent functions. This principle was further demonstrated by the conscious choice taken by CNLS and its partners to use a results-based planning and management methodology for the development of the new NSP, which puts emphasis on integrated planning and M&E, establishing results and HIV targets as essential components of the NSP framework.

2.4.2—The Three Ones

The Government of Rwanda is committed to the "Three Ones" principles, agreed upon in April 2004 as a country-level action aimed to scale up the national AIDS response. This plan outlines the last of the Three Ones: One agreed country-level Monitoring and Evaluation system.

2.4.3—A Public Health Questions Approach to HIV M&E

The investigation of any public health problem starts with asking pertinent questions that serve to initiate and organize the response: What is the nature of the problem? Who is it affecting, and what is the extent of it? What factors are contributing to the problem? Once an appropriate programmatic response has been determined, questions are focused on: Is the program working and, is the program reaching enough people to reduce the impact of the problem or, ideally, eliminate it? It is the combination of these complementary data collection activities that help to answer the simple, yet fundamental questions that must be answered in any public health response, namely: Are we doing the right things? Are we doing them right? (2)

Figure 12 provides an overview of the key questions about HIV and AIDS, and the variety of data collection methods that need to be put in place to gather the right information. These basic questions provide a simple and pragmatic way to obtain a comprehensive understanding of the HIV epidemic and response (2). The strategies outlined in this M&E Plan were guided by this questions approach in order to develop a functional M&E system that can answer the right questions in a timely manner.

2.4.4—Strategic Planning for HIV M&E

Not all programs and projects need to conduct all types of M&E activities. Figure 13, on the next page reflects the varying expectations for M&E among different programs and projects. All programs and projects are expected to participate in basic levels of M&E, including assessing needs and monitoring inputs and outputs once implementation begins, which is necessary both for the purposes of good program management and for reporting on common program-level indicators.

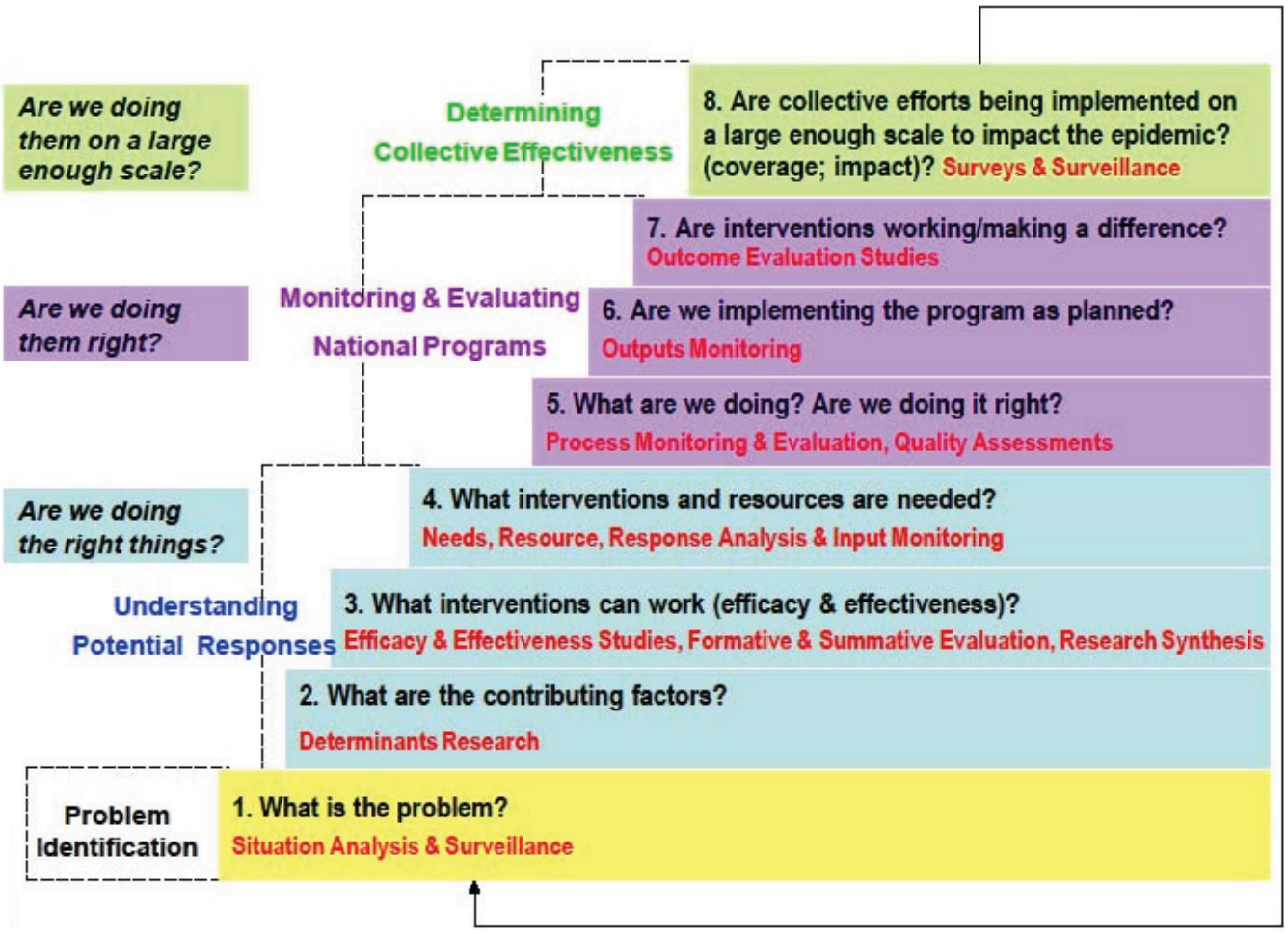

Figure 12—A public health questions approach to HIV M&E.

Most programs should also periodically conduct some basic process evaluations. Some programs will be able to conduct outcome monitoring and rigorous outcome evaluations: more established programs (outcome monitoring) or programs for which there is insufficient evidence that they work (outcome evaluation) as they are new or innovative or simply have never been evaluated.

Impact evaluation is done at the national level under the auspices of the government as they require large population sizes and considerable resources. All programs should be aware of these national and sub-national data and know how these data are relevant to their program. Comparing local program results with national and sub-national data provides a basis for determining program effectiveness. Such data also allows for determining the overall success or collective effectiveness of all programs that constitute the national HIV response.

At this stage, triangulation of multiple data sources is important. Long-term effects should be interpreted in the context of results from process and outcome evaluations and from existing survey data and output monitoring (3). This M&E Plan adopts a strategic planning approach to HIV M&E, detailing the organizational structures involved in HIV M&E functions and which organizations are responsible for which level of effort.

2.4.5—HIV Mainstreaming into Existing Government Structures

HIV is integrated and fully mainstreamed into the existing M&E systems of all EDPRS sectors. MINECOFIN is currently developing a detailed Institutional Framework for the M&E of EDPRS activities which will describe how each sector will integrate EDPRS activities, including HIV interventions, into existing M&E systems and frameworks. Linkages will be made between systems in order to increase coordination and information sharing across all sectors at both national and district levels while reducing the reporting burden on implementers and M&E staff at the decentralized level. Increased collaboration between HIV stakeholders and EDPRS HIV focal points at the national and decentralized level will be critical to ensure efficient planning, monitoring and evaluation of EDPRS HIV interventions.

The health facility-based components of the HIV M&E system are integrated and mainstreamed into the existing Health Sector M&E system. Health facility-based data on HIV interventions is collected and managed by MOH and TRAC Plus. The Health Sector M&E System is described in full detail in the Health Sector Monitoring and Evaluation Policy and Monitoring and Evaluation Strategic Plan 2009-12, though aspects of the system related to HIV M&E are also presented in this M&E Plan.

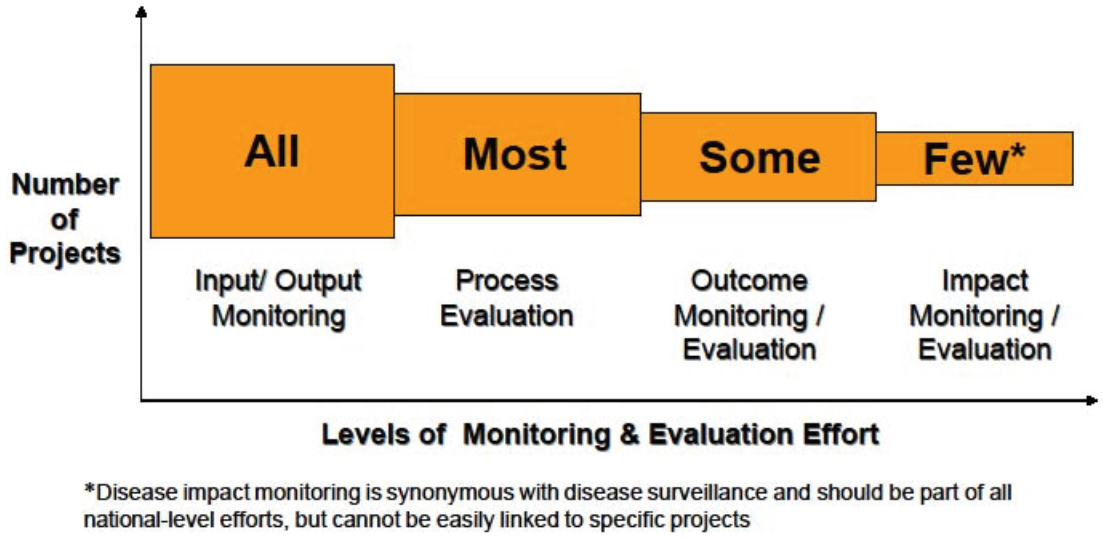

Figure 13—Strategic planning for M&E activities.

3. M&E SYSTEMS IN RWANDA

The M&E system, and thus the M&E Plan, has several purposes and was developed by employing various strategies guided by overarching principles as described in Section 2. In order to ensure that all essential components were included in the final M&E plan, it was decided to organize the M&E system around the twelve essential components of a functional M&E system, which outlines a comprehensive framework incorporating all M&E-related tasks.

In April 2008, the UNAIDS Monitoring and Evaluation Reference Group (MERG) published a multi-agency endorsed document introducing this organizing framework. The twelve components displayed in Figure 14 are further organized into three broad areas with sub-components in each area. This framework ensures the organization of a robust M&E system that will meet the needs of all stakeholders:

1. *People, Partnerships, and Planning*
   - » Organizational structures with HIV M&E functions
   - » Human capacity for HIV M&E
   - » Partnerships to plan, coordinate, and manage the HIV M&E system
   - » National multi-sectoral HIV M&E plan
   - » Annual costed national HIV M&E work plan
   - » Advocacy, communications, and culture for HIV M&E
2. *Collecting, Verifying, and Analyzing Data*
   - » Routine HIV program monitoring
   - » Surveys and surveillance
   - » National and sub-national HIV databases
   - » Supportive supervision and data auditing
   - » HIV evaluation and research
3. *Using Data for Decision-Making*
   - » Data dissemination and use

The use of data for decision-making is the central component of the framework and reflects the ultimate purpose of M&E in general: using data to answer fundamental questions about a program.

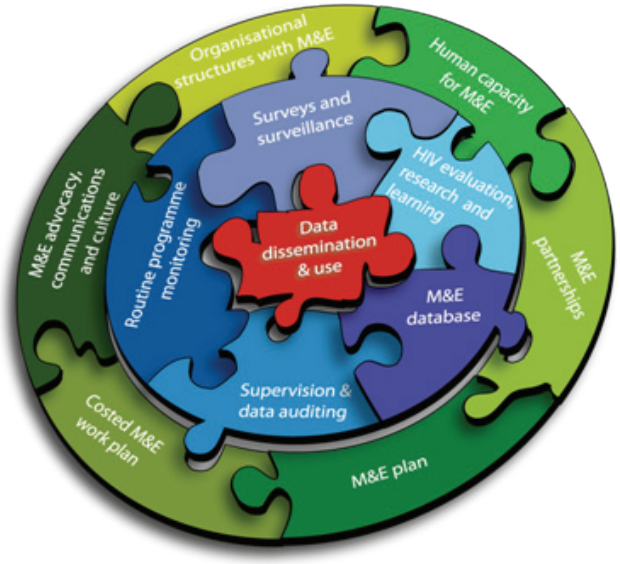

Figure 14—Organizing framework for a functional national HIV M&E system: 12 components, April 2008

3.1—COMPONENT 1: ORGANIZATIONAL STRUCTURES WITH HIV M&E FUNCTIONS

Key Strategies for 2009–2012:

- Strengthen the organizational structure of community-based components of the M&E system at national and district levels, including the M&E systems of sectors and civil society organizations
- Strengthen the organizational structure for health facility-based components of the M&E system

The HIV M&E System is primarily divided between health facility-based and non-facility-based, or community-based, components of monitoring and evaluating the national HIV response, and is decentralized from the national to district levels. The community-based activities are defined as all non-facility-based activities. The health facility-based components of the M&E framework are led by MoH and TRAC Plus at the national level and District Health Officers at the district level.

In general, health facility-based HIV M&E is integrated and mainstreamed within the existing M&E structures of MoH. The community-based components of the M&E framework generally refer to non-facility-based interventions at the community level. The CNLS and CDLS are the lead institutions for the coordination of community-based components of the M&E framework at the national and district levels, respectively. CNLS coordinates the M&E of community-based interventions across EDPRS sectors, including public and

private sector institutions and the civil society response through the umbrella organizations at the national level. CNLS is also responsible for providing guidance and capacity building to the lower levels. The CDLS are responsible for coordinating all community-based M&E interventions at the district level, including implementing partners and the decentralized structures of the public and private sector institutions and civil society umbrellas. The specific roles of the main actors in the HIV M&E system are outlined below.

3.1.1—Role of CNLS

The CNLS has the mandate of coordinating, monitoring and evaluating the national response to HIV and AIDS in the country. The Department of Planning, Coordination, and Monitoring and Evaluation (PCM&E) is ultimately responsible for HIV M&E at the national level with dedicated staff, including an M&E Officer and two data analysts, working closely with MOH/ TRAC Plus, EDPRS sectors, CDLS, and other stakeholders. In general, the CNLS monitors all community-based aspects of the epidemic. The main role of the CNLS includes the following:

- Coordination, supervision and provision of technical assistance and guidance in monitoring and evaluating the national response, including tracking progress made in program activities at all levels and supporting capacity building and training for M&E at all levels;
- Development and implementation of a national plan for monitoring and evaluating the national response, including defining national-level indicators, identifying means of verification and setting targets; guiding and supervising systematic data collection, storage and analysis at various levels; and providing the platform for partnerships, networking and collaboration between all levels of stakeholders in monitoring and evaluation;
- Development of national information products, as agreed upon by both national and international stakeholders, and disseminating these products in a user-friendly and timely manner.

3.1.2—Role of MOH and TRAC Plus

MOH and TRAC Plus are responsible for ensuring the coordination of all health facility-based components of the HIV M&E system at national and district levels. TRAC Plus ensures the complete description of indicators, data collection tools, plans for results sharing, and procedures for data quality assurance. TRAC Plus works towards the development and strengthening of health facility data infrastructures through the provision of standardized registers, forms, tools, and procedures for data collection, management and data quality assurance. Specifically, the key roles of MoH and TRAC Plus include the following tasks:

- Develop program indicators and provide clear definitions for each indicator;
- Develop standardized data collection tools at the health facility level;
- Build skills of health providers in data management and M&E;
- Monitor and improve data quality;
- Provide supervision and feedback to districts and health facilities on routine health data quality;
- Promote the use of information in decision making at the district level;
- Conduct epidemiological surveillance including behavioral sentinel surveillance (BSS) and sentinel surveillance of pregnant women attending antenatal clinics; and
- Harmonize health facility systems of reporting to ensure that HIV and AIDS data is integrated into the MOH HMIS system.

3.1.3—Role of EDPRS Sectors

According to the EDPRS, HIV is a cross-cutting issue and therefore each EDPRS sector must integrate and mainstream HIV interventions into their logical frameworks and strategic plans. Within the framework of fully integrating HIV and AIDS indicators and interventions across all sectors, each sector is responsible for carrying out the HIV-related interventions defined in the EDPRS logical frameworks and meeting the targets set. The EDPRS HIV focal people at the national and district level work closely with CNLS and CDLS, respectively, to ensure proper linkages in planning and reporting.

3.1.4—Role of TA/CDLS

At the district level, each district has a District AIDS Coordinating Committee (CDLS), including two TA/ CDLS. These two posts are respectively referred to as CDLS Coordinator in charge of planning, coordination, monitoring and evaluation; and CDLS Health Integration Officer. The CDLS ensure the planning, coordination, monitoring and evaluation of the AIDS programs and activities in their work-based district. The CDLS Officers work closely with district-level implementers, members of CNLS—especially the Department of Planning, Coordination, Monitoring

and Evaluation (PCM&E), decentralized structures—including civil society umbrella organizations, and community-based implementing partners, to ensure programming and execution of their activities and the proper functioning of the decentralized data collection and reporting structure. District-level TAs not only report information up to the national level, but ensure that information also reaches the appropriate district-level decision makers and stakeholders. Specific duties include the following:

- Registration and submission of names of all NGOs and CBOs involved in the HIV response;
- Coordination and supervision of planning and M&E activities at the district level, including conducting district level needs assessments and strategic planning exercises related to analyzing epidemiological evidence and developing evidence-based strategies in accordance with the NSP 2009–2012;
- Timely submission of all data to the CNLS in the agreed format;
- Activities related to data quality assurance and supportive supervision with district-level implementers;
- Data dissemination to local stakeholders at the district level.

3.1.5 – Role of Civil Society/Umbrella Organizations

Civil society umbrella organizations coordinate the collection and reporting of HIV data from civil society organizations. Umbrella organizations participate in all national-level activities, including the Planning, Monitoring and Evaluation Technical Working Group on HIV and AIDS (PM&E TWG); ensure that their members are familiar with the national M&E system and are actively contributing to its proper implementation; and conduct timely reporting on HIV indicators to both the CNLS at the national level and the TA/CDLS at the district level on all program-level activities. Different umbrella organizations have more specific M&E responsibilities in function of the civil society constituencies for which they represent.

The specific M&E roles for each umbrella are:

- The Rwanda Network of People living with HIV/AIDS (RRP+) is responsible for coordinating the planning and M&E activities of cooperatives and associations of PLWHA in all districts. District-level RRP+ representatives are members of the CDLS in each district and work closely with the CDLS TA in the implementation of district-level M&E activities. In addition, RRP+ is responsible for measuring certain national-level indicators related to progress in mitigating the impact of HIV and AIDS. These include the implementation of a system to systematically document cases of stigma and discrimination against PLWHA and conducting national surveys related to stigma and discrimination of PLWHA (Rwanda Stigma Index).
- The Umbrella of People with Disabilities (PWD) is responsible for the coordination of planning and M&E activities of associations and organizations of PWD. These umbrella organizations are also responsible for ensuring that their constituents participate in all national and district-level planning, monitoring and evaluation activities as coordinated by CDLS TA in each district where they work.
- The National Youth Council (NYC) and National Women's Council (NWC) are responsible for the planning and M&E activities of the district-level counsels of women and youth active in each district.
- The Umbrella of Religious Leaders (RCLS), the Rwanda NGO Forum, and the Umbrella of Journalists against HIV and AIDS (ABASIRWA) are responsible for conducting advocacy and information dissemination activities with their members at both the national and district levels. These umbrella organizations are also responsible for ensuring that their constituents participate in all national and district-level planning, monitoring and evaluation activities as coordinated by CDLS TA in the districts they cover.
- The Private Sector Federation (PSF) and Umbrella of Public Sector Institutions are responsible for the planning and M&E activities of HIV workplace programs among their constituents in all districts. These umbrella organizations are also responsible for ensuring that their constituents participate in all national and district-level planning, monitoring and evaluation activities as coordinated by CDLS TA in each district.

3.1.6—Role of Health Facilities

Efficient use of health information to monitor and evaluate the extent to which stated targets are being achieved relies on effective health data management. This requires dedicated staff and resources for coordination and management of health information used for

decision making. In implementing this M&E system, different roles and responsibilities have been assigned to district hospitals and health centres. The district hospitals will have a data manager trained in basic M&E skills and concepts. District hospitals are expected to perform the following tasks:

- Provide technical support and coordinate data management and data quality assurance to health centres;
- Promote use of information for decision making at the district and health centre level; and
- Provide formative supervision to health centres.

Health centres are expected to conduct the following tasks:

- Provide technical support and supervision to community health workers, including the data quality improvement and management at the community level; and
- Promote the use of information within communities in their catchment areas.

3.1.7—Role of Community Health Workers (CHW)

Community Health Workers (CHW) provide HIV services to the community during household visits and when they assist nurses providing vaccinations and pre-natal services through Outreach Clinics within the health facility target zone. CHWs serve as a link between the health facilities and the community, and have a role in providing home-based care to PLWHA, referring pregnant women to health facilities for ANC and PMTCT services, and following-up on HIV-exposed infants. CHWs also collect data on population, vital events, sanitation, HIV, immunization, and family planning service coverage on an annual basis.

3.1.8—Role of NGOs, Development Partners and Donors

NGOs and other development partners are expected to participate in the basic levels of M&E, including assessing needs and monitoring inputs and outputs once implementation begins. In addition, NGOs and other development partners are responsible for reporting this information to CDLS in the agreed reporting format. Donors are responsible for ensuring that adequate resources are allocated to HIV M&E-related activities and that all implementing partners funded by donors are actively participating in all HIV M&E-related activities at the national and district levels, and have the capacity to measure and report on national-level indicators and program-level indicators.

3.2—COMPONENT 2: HUMAN CAPACITY FOR HIV M&E

Key Strategies:

- Recruitment of additional M&E staff according to need
- M&E training for M&E staff at all levels, including development of HIV M&E training curricula
- Development of M&E training materials on data software and management

In addition to ensuring that M&E staff are put in place at all levels, the staff also need to have the minimum job requirements and satisfactory skill sets to properly perform their required M&E tasks. Further human capacity development is needed to ensure that all staff have the same skill sets and understanding of M&E activities, and that M&E staff at all levels are trained and informed about relevant tools. Standardized M&E training curricula targeting M&E staff at all levels will be developed to assure consistency in M&E activities. New M&E tools will be disseminated and relevant staff will be trained on the proper use of new tools. Opportunities will be available for participation in international conferences and workshops which will provide new skills and strengthen the capacity of M&E staff.

3.2.1—Community-based Components at National and Decentralized Levels

The CNLS organizes targeted M&E trainings for M&E staff at the national level, particularly for strengthening the M&E systems—and newly recruited M&E staff—of umbrella organizations. Focus is also put on district-level M&E staff, at both CDLS and the decentralized structures of sectors and umbrella organizations, to improve their M&E skills and capacities, and support the overall coordination of community-level M&E activities. National and district-level M&E staff are trained together on the operational tools and guidelines developed at the national level to ensure their successful implementation at the district level and foster closer collaboration and information exchange between the two levels.

3.2.2—Health Facility-Based Components at National and Decentralized Levels

In order to enable health facility-based monitoring and evaluation systems to efficiently generate quality data and effectively use these data for reporting, planning and decision making, MOH and TRAC Plus have embarked on a capacity building strategy focused on skills-based training for facility-based staff and the

development of standards and protocols. Health facility staff is trained in basic M&E skills and concepts including management of data and information. Most importantly, key staff is trained in the utilization of data and information especially for planning and decision making at the facility level in order to improve health systems.

These trainings target both data users and data producers at the facility level and promote regular analysis and sharing of data and information through monthly and quarterly review meetings. MOH and TRAC Plus are developing health facility-based standard operating procedures (SOPs) for data management and reporting, supportive supervision and mentoring, routine data quality audit and self-assessment, guidelines for data sharing and protection and data use and dissemination. In addition to ensuring that all health facilities are using standard tools and formats for data collection and reporting, MOH and TRAC Plus are redefining and standardizing health indicators at the facility and lower levels, including the strengthening of supervision and feedback mechanisms.

3.3—COMPONENT 3: PARTNERSHIPS TO PLAN, COORDINATE, AND MANAGE THE HIV M&E SYSTEM

Key Strategies:

- Strengthen technical working group for community-based M&E stakeholders (PM&E TWG)
- Strengthen technical working group for health facility-based M&E system stakeholders (refers to existing MOH M&E Task Force, including TRAC Plus)

CNLS is responsible for collecting data from both community-based and facility-based components of the M&E system and to include them in the annual report and other international reports (e.g. UNGASS). MOH and TRAC Plus are responsible for collecting and consolidating all clinical data regarding HIV and AIDS. Data collected by the non-health EDPRS sectors is part of the district-level; M&E system and are transmitted by the respective district-level EDPRS sectors to CDLS/TA. This information is subsequently reported to the national level to EDPRS sectors, and MINECOFIN, and CNLS, respectively. This is further described in Component 7. The CNLS and TRAC Plus co-chair a national HIV and AIDS Planning, Monitoring & Evaluation Technical Working Group (PM&E TWG) composed of planning and M&E experts from government sector representatives, UN agencies, multilateral and bilateral agencies, civil society umbrella organizations and other key NGOs, the private sector, academic and research experts involved in the community-based M&E system. The PM&E TWG is a national-level working group but works with district-level HIV M&E stakeholders to improve the linkages between the national and decentralized levels for M&E. The PM&E TWG provides overall guidance and technical assistance to the implementation of the national M&E system.

The PM&E TWG is primarily responsible for developing and implementing the integrated HIV M&E annual work plan each year (See Component 5). The PM&E TWG meets quarterly to review progress on implementation of the annual work plan, and to perform additional ad-hoc tasks as required. All tasks are elaborated in the Terms of Reference for the PM&E TWG; an excerpt of these tasks is presented below:

- Facilitate the development of M&E institutional and human capacities;
- Organize data reconciliation meetings to agree collectively on one national number for each of the selected national level indicators;
- Provide technical assistance for data analysis and feedback to M&E stakeholders and partners;
- Assure that HIV data is available and that data is used for evidence-based decision making;
- Propose key prioritized evaluation studies, in addition to the mid-term review of the NSP;
- Assist in the revision and harmonization of data collection tools and data flow systems;
- Promote harmonization of data usage and interpretation of HIV M&E concepts and processes at the district and national level; and
- Assist in the conduct of routine data quality audits at health facilities and implementation of action plans to improve data quality.

3.4—COMPONENT 4: NATIONAL MULTI-SECTORAL HIV M&E PLAN

Key Strategies:

- Support planning processes at the national, sector and district level
- Organize midterm review of NSP

In line with the results-based planning and management approach adopted for the NSP, planning and M&E activities are interlinked. The NSP serves as

the main planning document, describing all national indicators and baselines, and the stated targets to be achieved at each result level in the NSP. This M&E Plan, and the overall M&E system, is thus linked to the M&E of planned results and targets put forth in the NSP. The NSP and the M&E Plan will be jointly reviewed by all stakeholders at mid-term to ensure that adequate progress is being made towards the achievements of targets for 2012. At the end of the implementation period, a similar joint commission will evaluate the overall success of the NSP, including the M&E component, in order to assess achievements made over the implementation period and provide evidence-based recommendations for the next plan.

Operational planning tools focus on program-level results, rather than activities, in line with the results-based methodology of the NSP. District-level community-based implementers develop annual action plans linked to the achievement of specific results outlined in the NSP. This process takes place according to the governmental planning cycle (July–June) so that MoH, other ministries and EDPRS sectors conduct coordinated planning activities. Community-based implementers use a standardized tool for planning and reporting that is also used by MoH and their partners. This tool, the joint action work plan (JAWP), collects information on all HIV activities planned during the year, including beneficiary groups and estimated budgets according to standard cost categories, and links each activity to an NSP output result.

In terms of reporting, the JAWP serves as the general monitoring tool to ensure that district-level interventions are on track to achieving the overall target results set forth in the NSP. The CDLS are not expected to report quarterly on the progress of the work plan. In line with the NSP results framework, community-based implementers are expected to report twice per year to the CDLS/TA on their contributions to the standard list of program-level implementers.

3.5 – COMPONENT 5: ANNUAL COSTED NATIONAL HIV M&E WORK PLAN

Key Strategies:

- Costing of National M&E Plan
- Joint development of annual M&E work plan

In order to ensure the timely implementation of all HIV M&E-related activities necessary for the full functioning of the M&E system, it is important to have a national integrated HIV M&E annual work plan which describes all annual activities. For each year of implementation of the M&E Plan 2009–2012, a national integrated HIV M&E annual work plan will be jointly developed by all HIV M&E stakeholders, including activities, implementers, timelines, and activity costs for the successful implementation of all M&E activities in the country. This national integrated HIV M&E annual work plan will be developed each year based on a review of the annual activities included in the M&E section of the NSP Operational Plan 2009–2012, a review of the previous year's national integrated HIV M&E annual work plan, and any other M&E systems strengthening activities identified for implementation by the PM&E TWG.

First, the NSP Operational Plan 2009–2012 is a comprehensive database of all HIV activities, including HIV M&E-related activities, to be implemented in Rwanda for the entire NSP implementation period. For each activity, the NSP Operational Plan 2009–2012 describes the year(s) for implementation, the proposed implementer of the activity, and the relative cost of the activity. This operational plan served as the basis for the overall costing of the NSP 2009–2012 and is meant to describe all HIV activities nationwide to orient program planning and resource mobilization. The M&E portion of this document lists the entity responsible for implementation and a detailed budget for each HIV M&E activity, but the source of funding is not identified.

Each year, the PM&E TWG will extract the annual activities from the NSP Operational Plan 2009–2012 and organize them into a national integrated HIV M&E annual work plan which provides further details on the timeline for implementation, precise costs for the activity and the funding source. This national integrated HIV M&E annual work plan will be further supplemented by any ongoing M&E activities from the previous year's national integrated HIV M&E annual work plan, or other time-bound activities that weren't fully implemented or completed. The PM&E TWG will also incorporate additional M&E systems strengthening activities identified during the previous year.

The national integrated HIV M&E annual work plan will be regularly reviewed by the PM&E TWG on a quarterly basis to monitor progress in its annual implementation and adjust timelines, implementers, and/or budgets as necessary. At the end of each year, the integrated HIV M&E annual work plan will be assessed

in a participatory workshop with all stakeholders to determine ongoing activities or other activities not fully implemented or completed. The results of this annual assessment will feed into the development of next year's national integrated HIV M&E annual work plan, together with the NSP Operational Plan annual activities and other M&E systems strengthening activities identified.

3.6—COMPONENT 6: ADVOCACY, COMMUNICATIONS, AND CULTURE FOR HIV M&E

Key Strategy:

- Raising awareness of importance of M&E

A general culture of M&E exists in Rwanda and is increasing over time. Stakeholders understand the importance of having a functional M&E system and incorporate M&E-related activities into their work plans. To further build on this existing culture, efforts will be made to incorporate sessions and presentations on the importance of M&E in other meetings, workshops and conferences to further increase awareness. For example, data dissemination and use sessions will be conducted around the two international conferences organized each year (HIV and AIDS Research Conference and Pediatric HIV Conference) for all stakeholders to improve the availability of research findings. The PM&E TWG will assist in compiling M&E resources to be added to the HIV/AIDS digital library housed at CNLS.

3.7—COMPONENT 7: ROUTINE HIV PROGRAM MONITORING

Key Strategies:

- Strengthen M&E of community-based activities implemented at the district level
- Strengthen routine program monitoring, particularly programs targeting OVC and other vulnerable groups
- Strengthen M&E systems at health facilities

In order for the national HIV M&E system to function, core data sources for all indicators—both national-level and program-level indicators—have been identified and agreed upon by all stakeholders, including annual, mid-term, and end-term targets (depending on indicator level). There are two major categories of data sources for HIV indicators at both levels: data collected through surveys and special studies and data collected through routine reporting mechanisms.

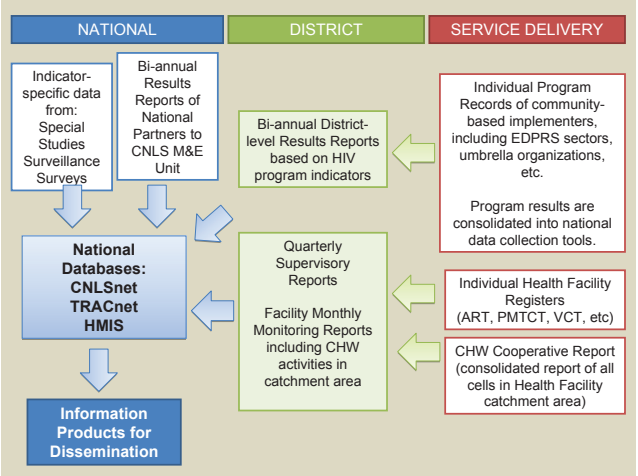

Figure 15— Mapping data flow for national-level and program-level indicators.

Figure 15 displays the flow of data from primary data sources for all national and program indicators to the information products where this data is ultimately consolidated and used for planning and reporting purposes. For indicators with core data sources coming from surveys or special studies, the relevant data sources are described in more detail under Components 8 and 11, for surveys/surveillance and other special studies, respectively. For indicators with core data sources collected through routine reporting, detailed information is provided in this section.

3.7.1—Routine Reporting of Community-Based Activities Implemented at District Level

Community-based data for routine reporting of district-level implementers are collected at the service delivery level through the individual program records kept by implementing organizations such as community-based civil society organizations, public sector implementers from EDPRS sectors, and the constituents of umbrella organizations implementing in the districts. The data recorded in program records is based on the HIV activities they implement in the district according to their annual work plans (See Component 4). Narrative progress reports on district-level HIV activities are provided by each implementer to CDLS through a Quarterly Activity Report. These reports serve as the basis for supervision activities conducted by CDLS TA in the districts (See Component 10).

In addition to quarterly activity reports, all district-level implementers are required to submit a Results Report to the CDLS technical assistants twice per year, using standardized national reporting tools and according to

national indicator definition (Program-level indicator definitions and copies of all data collection and reporting tools for community-level indicators are provided in Annex B). The Results Report collects aggregate data drawn from the program records of each implementer on their individual contributions to the achievement of HIV targets. The Results Report collects monitoring data on indicator values for all national and program-level indicators at the service delivery level. The aggregated results are consolidated at the district level and reported by the CDLS technical assistants to CNLS via the CNLS database (see Component 9). Paper-based reports are kept at the CDLS office and used for data quality assurance activities (see Component 10).

3.7.2—Routine Reporting of Activities Implemented at the National Level

Some HIV implementers intervene directly at the national level, either through providing technical assistance to national institutions or coordinating national awareness campaigns, in addition to or in lieu of district-level activities. These implementers directly report to the CNLS M&E Unit for all activities and results using the same Results Report forms used by district-level implementers. These reports are consolidated at CNLS and results are entered directly into CNLSnet.

3.7.3 – Routine Reporting at Health Facilities

In general, health facility information is collected through various registers which are used to record data on services on a daily basis at the time of service delivery. Patient-specific data from registers are recorded daily into patient files in order to collect longitudinal data on patients. Though MOH and TRAC Plus anticipate transitioning to electronic medical records which will eventually capture patient-level information for aggregate reporting on a majority of the national indicators, the facility registers currently serve as the primary source of facility data. Data for reporting on national and program HIV indicators are drawn from the following registers (records):

- VCT register captures individual data on each client coming to the health facility for VCT services. The register collects the date of the visit and the following socio-demographic information for each client: age, sex, marital status, administrative sector, educational level, and previous history of HIV testing (six months).
- Counseling and testing register captures individual data on each client coming to the health facility for counseling services. The register collects the date of the visit and the following information for each client: age, sex, HIV results, reported number of partners, any referrals made to other services, and information about partner testing.
- Antenatal register captures individual data on each pregnant woman attending prenatal visits at a health facility. The register records the pregnancy history of the mother, including previous pregnancies and complications, and also provides information on the current status of the pregnancies and any possible complications that are related to the pregnancy. HIV/AIDS and syphilis monitoring has been integrated.
- PMTCT register captures individual data on each HIV+ pregnant women attending PMTCT visits at a health facility. The register tracks a woman through each visit to the facility and includes the data of the visit and the following client-level information: referral number from prenatal register, results of HIV and syphilis tests, expected date of delivery, information about partner testing, and tracking of ART.
- HIV exposed infant follow-up register captures individual data on each baby born to an HIV+ mother who delivered at a health facility, as well as the other PMTCT services the mother is receiving during postpartum care. The register tracks the date of the visit and the following information on the exposed infant: date of birth, weight at birth, ARVs mother (yes or no), ARV child (yes or no), type of feeding, age of child at weaning, and scheduled consultations: at birth, at 1 ½ months, at 2 ½, 3 ½ months and at 9 months, and HIV testing to 18 months, (date of test, HIV test results).
- Family Planning register captures individual data on each woman of reproductive age (15-49 years) as well as men of adult age receiving family planning services at a health facility. The register tracks the date of the visit and the following client-level information: age, dates of consultation, partner, and family planning method used, as well as HIV status, thus enabling integration of services.
- Pre-ART and ART register captures individual data on each HIV+ individual's visit to a health facility. The register tracks each visit to the facility and includes the date of the visit and the following client-level information: date, TRACnet tracking number, age, sex, administrative sector,

CD4 count at last measurement, TB screening, WHO staging, status and history of OI and STI, current ART regimen, ART initiation date, and any other referrals. Referrals information includes psychosocial support and nutritional support.

- Surgery register captures individual data on each newborn being circumcised at a health facility. The register tracks the date of the procedure and includes the following information:
  - » Laboratory registers from National Reference Laboratory and the National Blood Transfusion Centers capture data on the number of donated blood units screened for HIV in a quality assured manner.
  - » Post Exposure Prophylaxis register captures individual information regarding the services received for people at risk of HIV infection as a result of occupation and other non-occupation exposures to HIV. It also includes information on the HIV test done three months after exposure.
  - » Maternity register captures information on admissions and deliveries taking place within the health facility, including deliveries before arrival, deliveries at home and referrals to the facility. It also records data on HIV testing and results received during labor or after delivery and ARVs administered (where applicable).

Each facility reports on monthly aggregate data using the District Hospital or Health Centre Monthly Reporting Forms (Canevas du Rapport Mensuel) (See Annex C). MOH currently uses two parallel systems to collect comprehensive health data (including HIV): HMIS and TRACnet; but within two years plans to integrate all data collection systems into one single comprehensive system that will capture all health-related data. The District Hospital and Health Centre Monthly Reporting Forms are user-friendly forms that were designed to be similar to the data capture interface that is used for mobile-phone-based reporting into the TRACnet system. All aggregated data is entered into the phone data capture interface and electronically submitted to TRAC Plus via TRACnet. Facility data is then downloaded and aggregated into a national data report based on the different indicators.

The HMIS data flow is similar but currently not electronic and covers all other health data. Rather than district-level Data Managers entering monthly reporting data directly into the national database via mobile phones, Data Managers send the paper-based Monthly Reporting Form to MOH where data are entered for all facilities into the HMIS system by central data entry staff each month. The two systems each collect indicators on HIV and AIDS data from the health facility on a monthly basis. Plans for strengthening the data management and reporting system are being developed. These include the collection and reporting of all HIV and AIDS data from health facilities using only TRACnet and establishing a link with HMIS to allow data replication.

3.7.4—Routine Reporting of Community Health Worker Activities

There is also a system of data collection linking the health facility to the community through the community health workers working at the village level. Community Health workers (CHW) provide services to the community during household visits and when they assist nurses providing vaccinations and pre-natal services through Outreach Clinics within the health facility's target zone. CHWs collect data on population, vital events, sanitation, HIV, immunization, and family planning service coverage on an annual basis.

At the end of each month, the CHWs who work together in the same village, meet to consolidate data from their individual registers and fill out a village-level CHW monthly report form. The CHW supervisor at the health facility compiles all of the lower-level reports together and sends a facility-level monthly report form to the District Hospital. Figure 16, on the next page, displays the data flow for this community health information system in more detail.

3.8—COMPONENT 8: SURVEYS AND SURVEILLANCE

Key Strategy:

- DSH+ 2010; Service Provision Assessment 2011; BSS 2009, 2011; ANC Sentinel Surveillance (HIV and Syphilis) ; ART Adherence Surveillance studies; Rwanda Stigma Index; Surveillance of quality of HIV services; HIVDR surveys.

The production of timely and high quality data through surveys and surveillance is critical to the effective monitoring and evaluation of the HIV response. In addition, some national-level indicators can only be measured through surveillance activities and it is necessary to ensure that all surveys and surveillance activities capture

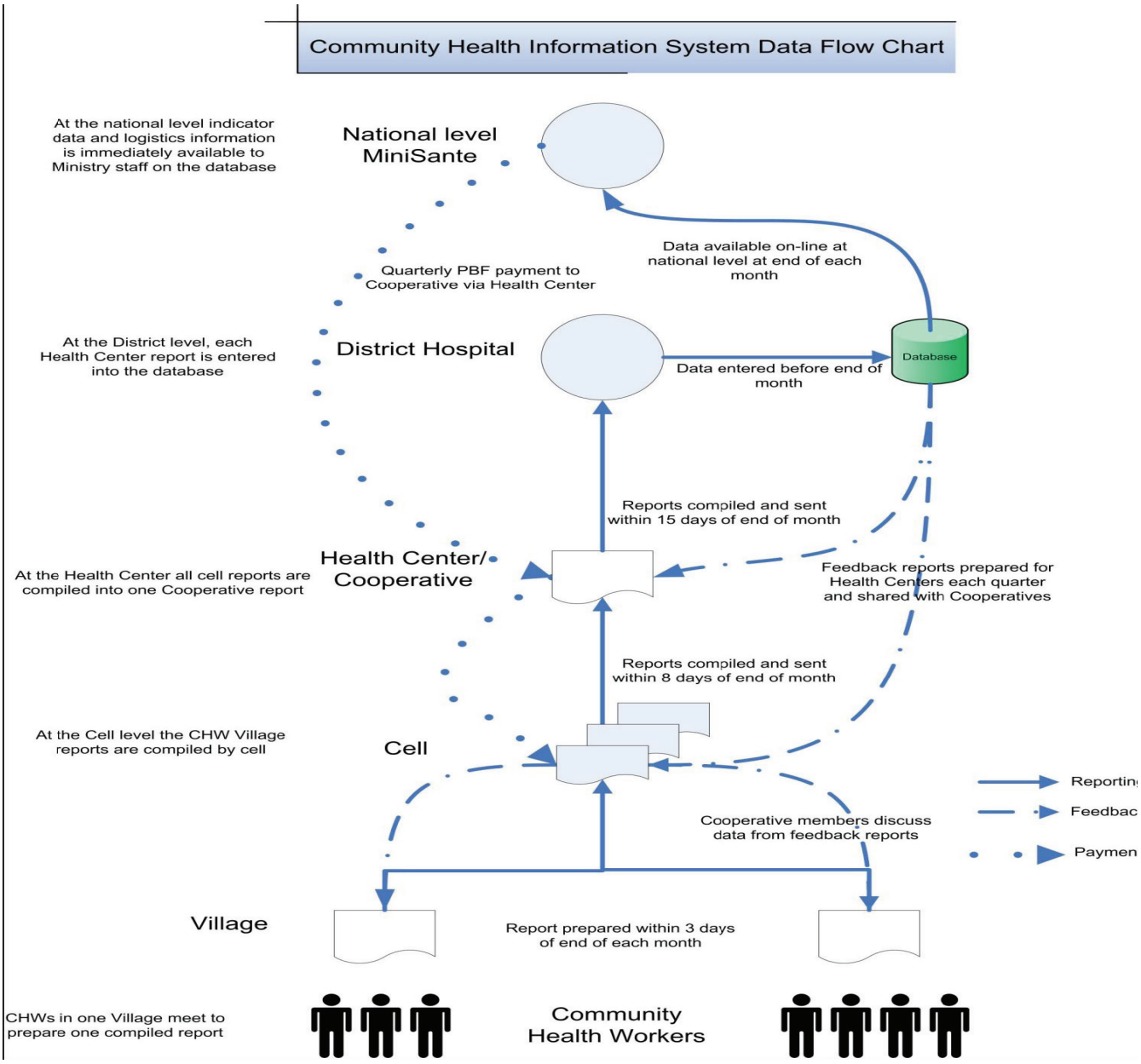

Figure 16—Community Health Information System Data Flow Chart.

the appropriate information needed by the M&E system. It is important to note that some indicators will also use routine reporting data as a secondary source for monitoring progress in the short-term, as surveys are typically conducted after longer intervals of time. Results from these surveys that inform national indicators will be routinely updated into national databases as data becomes available in order to maintain an updated registry of all national results by indicator.

Several biological and behavioral surveys will be conducted during the implementation of the NSP. The major surveys planned are:

- Demographic and Health Survey (DHS+) is a population-based survey conducted by the National Institute of Statistics with technical assistance from ORC MACRO, MOH and other partners. Apart from behavioral indicators collected, blood samples are also taken from individuals interviewed for HIV testing with their consent in order to determine national HIV prevalence estimates for the general population.
- Behavioral Sexual Surveillance (BSS+) is a survey carried out every two years on selected HIV risk populations by TRAC Plus and other partners. Behavioral indicators and program exposure information are collected for all risk populations. Blood samples are taken from some risk groups interviewed for HIV testing with their consent. The BSS+ 2009 will collect data from youth, truck drivers, and sex workers, including HIV prevalence of the sex worker population. Future surveys such as BSS+ 2011 will continue to monitor existing and emerging at-risk-populations, based on epidemiological and behavioral risk data collected from operational research and special studies on at-risk populations.
- Service Provision Assessment (SPA) is conducted by NISR and MOH and assesses availability and quality of service provision in the health facilities within the country. The facilities are selected randomly for representation and estimation at the national level. TRAC Plus will monitor the availability and quality of HIV services as well through annual surveys of health facilities.
- Stigma Index analyses information collected on stigma and discrimination against HIV positive members of associations of the Réseau Rwandais des Personnes Vivant avec le VIH (RRP+) that contributes to the understanding and reduction of stigma and discrimination in PLWHA. The Stigma Index will be conducted on a regular basis to serve as a surveillance tool for monitoring the manifestation of stigma and discrimination among members of associations and cooperatives of PLWHA in Rwanda.
- HIV Sentinel Surveillance through women attending antenatal clinic visits is another important survey. Rwanda established its sentinel surveillance system in 1989. The system currently consists of 30 consistent ANC sites in place since 2005 throughout the country, providing HIV and syphilis prevalence data on pregnant women every two years in order to follow trends over time.

CNLS and TRAC Plus will ensure that data collection on benchmarks and indicators to be reported as part of the national indicators are incorporated into all surveys and surveillance activities. Quality control measures will also be established to improve the data collection efforts and reliability of national surveys. All surveys and surveillance activities are costed in the M&E operational plan.

3.9 – COMPONENT 9: NATIONAL AND SUB-NATIONAL HIV DATABASES

Key Strategies:

- Strengthening of CNLS district-level community-based activity databases
- Development of databases in each Umbrella Organization
- Strengthening of TRACnet health facility-based databases
- Development of health facility database

There are two functional web-based databases for capturing and storing data generated by the HIV M&E system: the CNLSnet database for district-level community-based HIV data (www.cnls.gov.rw), and TRACnet database for HIV health facility site-specific data (www.tracrwanda.org.rw).

3.9.1 – Community-Based Component at National and District Levels

The CNLSnet database is managed by CNLS and routinely updated by the CDLS technical assistants who enter data from bi-annual results reports for all HIV interventions conducted by HIV implementers in their district. The database was designed with a focus on data dissemination and end-user functionality, where any user who has access to the internet can generate custom query reports on any data in the database. Each district-

level implementer submits their annual action plan to the CDLS/TA (See Component 4) who subsequently enters information on each implementer into the CNLSnet database. At the national level, this information serves as a registry of all HIV implementers by district and gives a snapshot of the various HIV interventions being implemented in each district.

Upon consolidation of district-level results reports every six months, CDLS/TA report on district-level progress towards achieving national HIV targets through the CNLSnet. National partners provide their results reports twice per year directly to the CNLS M&E Unit who in turn consolidate the results and enter them into CNLSnet. This information is aggregated and cleaned at the national level by the CNLS M&E unit to obtain national-level aggregate results for all national and program-level indicators twice per year. The results reported by CDLS/TA also serve as the basis for data quality assurance activities conducted by CNLS (See Component 10).

In addition, other government institutions and implementers have databases to assist in data collection strategies. For example, the MIGEPROF is developing a database to store information on all of the OVC receiving services in the country. Simple databases will also be developed at sub-levels for civil society umbrella organizations and health facilities to improve data storage abilities at all levels. Linkages will be made between databases so that the central HIV reporting database CNLSnet is able to query and extract relevant data on HIV targets which are stored in other databases.

3.9.2 – Health facility-based component at National and District levels

The TRACnet database currently collects site-level ART data from each health facility providing ART in the country. TRACnet is being expanded to collect VCT, PMTCT, HIV/TB, STI and nutritional (data for HIV positive patients) and will be updated to include patient-level monitoring from electronic medical records, in addition to site-specific information, so that real-time data will be available on individual patient outcomes over time. The database will ensure patient confidentiality while improving access to relevant information to the selected end users. In addition, TRAC Plus is implementing the Open Medical Record System (OMRS), an electronic medical records system designed to improve the management of health information and promote data usage, in all health facilities. Strategies

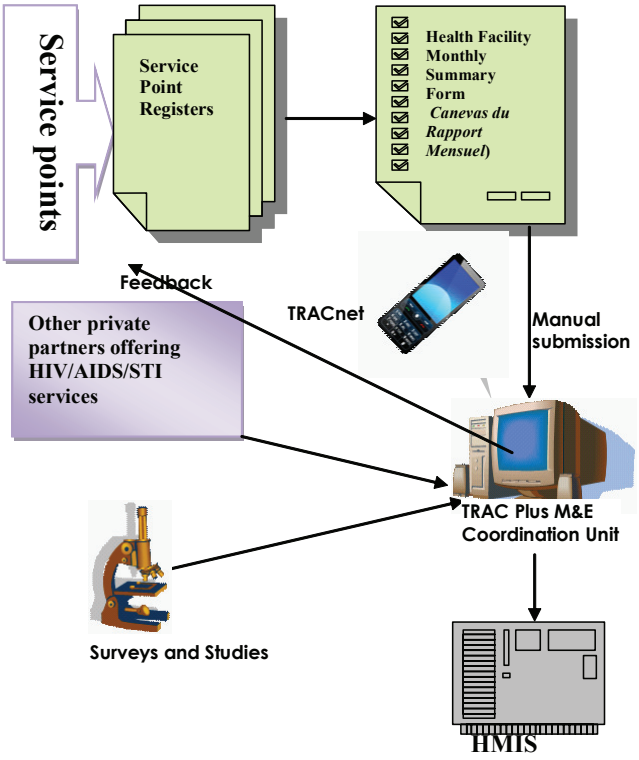

Figure 17—TRACnet Data Flow.

are currently under development to dictate protocols for data management, storage, sharing and release by TRAC Plus and MoH. Figure 17 displays the data flow mechanisms for TRACnet.

3.10—COMPONENT 10: SUPPORTIVE SUPERVISION AND DATA AUDITING

Key Strategies:

- Supportive supervision and data quality audit of community-based and district-level implementers, including CSOs
- Supportive supervision and data quality audits at health facilities

3.10.1—Community-based Supervision Visits at National and District Levels

Though several different supervisory mechanisms are in place, there are two principle levels of supervision in the community-based system: CNLS conducting supervision visits to the CDLS, and CDLS conducting supervision visits to its district-level HIV implementers. All supervision is conducted conjointly both at national and decentralized levels. The main objectives of supervision visits at both levels are: to monitor implementation of annual action plans, identify problems in service delivery and propose solutions, and provide guidance

and information sharing on the implementation of the M&E system.

The CNLS performs bi-annual supervisory visits with stakeholders including implementing partners, civil society representatives, EDPRS HIV focal points and donors, to each district and provides a feedback report to CDLS technical assistants on progress in implementation of HIV activities during the year. At the decentralized level, CDLS members conduct monthly supervision visits to implementing partners conjointly with umbrella organization district representatives, EDPRS district representatives, and other stakeholders to visit implementers at the service delivery level.

Other supervisory visits include the annual supervisory visits of the PEPFAR Steering Committee and EDPRS integration visits. Despite these annual visits, other routine feedback mechanisms and dissemination guidelines are under development to assure that national-level information on performance reaches the relevant decentralized stakeholders in a timely manner (see Component 12). National guidelines for supportive supervision approaches for both CDLS/TA and umbrella organization decentralized structures are established to provide ongoing mentoring to district-level staff on the improvement of the overall M&E system.

3.10.2 – Community-based Data Quality Assurance (DQA) Activities at National and District Levels

In the community-based M&E system, data quality assurance (DQA) is the responsibility of the organization that directly receives the results reports. Thus, at the district level as CDLS are responsible for assuring data quality of district-level HIV implementers who directly report to them, the EDPRS sector district representatives and the civil society umbrella organization district representatives are equally responsible for assuring the quality of data reported to them by their respective constituencies, which they subsequently report to CDLS. CDLS conducts annual data quality audits with HIV implementers and other district representatives who directly report to CDLS in accordance and in preparation of the CNLS schedule for data audits described below.

At the national level, an annual data audit is conducted by CNLS to assess the completeness of district-level reporting and the degree to which national-level tools and formats are being respected both by district-level HIV implementers and CDLS technical assistants. Annual data quality audits ensure the soundness of data that is being reported both from the service delivery level to the district level, and from the district level to the national level via CNLSnet. Improving the quality of collected data is essential to ensure that evidence-based decision making is informed by the most accurate information.

The data quality audit is largely organized around the results reported into CNLSnet by CDLS twice per year. This involves both the CNLS at the district level and the CDLS technical assistants at the service delivery level in order to identify and propose solutions for potential problems with data collection. For the partners implementing at the national level (UN agencies, Projects or NGOs based at the national level) the CNLS M&E Unit is responsible for all M&E activities including supervision and DQA.

3.10.3 – Health facility-based component at National and District levels

TRAC Plus is responsible for the monitoring of the effectiveness and efficiency of the national response to HIV/AIDS at the clinical level (i.e. health facilities) using an M&E system based on a dynamic Information Technology solution (TRACnet) that is designed to collect, store, retrieve and disseminate critical program, drug and patient information related to HIV/AIDS.

TRAC Plus has put in place systems to increase confidence in the data within its databases and improve reliability of data and information used for planning, implementation management and decision making. The overall purpose is to ensure that the data generated can effectively and credibly support decision making by undertaking data validity and reliability assessments in district hospitals and health centres. TRAC Plus uses the following approaches in enhancing the quality of data and information collected from health facilities and used for reporting to the national and donor level.

- Automated Data Verification/Validation: TRACnet has built-in data checks (that include verification checks, validation checks, presence checks, and range checks) and performance metric alerts. Data checks are designed to flag for data above or below expected ranges, data of different field types, and fields left blank. Accessibility to TRACnet is restricted to approved users so as to avoid data errors arising from unrestricted data entry and manipulation. On a daily routine basis, TRAC Plus conducts visual checks to verify all the data elements uploaded in TRACnet. Every week,

a daily routine verification report is generated and shared with other departmental personnel, including facilities that might have had data quality issues. Plans are underway to intensify regular data analysis which in turn is meant to improve TRACnet automated data verification/validation performance checks through the identification of data gaps that will be included in the software flags.

- Annual Data Quality Audits: TRAC Plus M&E unit conducts annual data quality audits on a sample of selected facilities aimed at:
  - » Verifying data uploaded in TRACnet with records in the health facility monthly summary reports, registers, and patient records to ensure that what was compiled and reported is accurate and complete; and
  - » Providing training support to health providers in data collection, data management, reporting, and validating procedures used at the health facility level in the recording, compilation, storage, and management of data including its use.

  A standard routine data quality assessment tool adapted from the Global Fund/PEPFAR tool is being used and results of the assessments are being captured in a central database to allow for comparison of individual health facility performance based on the DQA assessments results across different points in time. In addition, the central database serves as a repository for quick access on information regarding the health facility when preparing for DQAs. Through support from partners, the MOH and TRAC Plus are developing a standard DQA manual including a training curriculum to be used by all programs providing services in the health sector. In addition, data quality audits at pre-determined periods will be conducted by external auditors in coordination with TRAC Plus and implementing partners.
- Monthly Feedback Reports/Supervision Reports: TRAC Plus is recruiting Data Analysts that will analyze data in the TRACnet and generate tables, graphs and charts for each health facility and overall district performance report. These analyses will be made available to the districts and health facilities on a monthly basis through the feedback reports and will be a mechanism of verifying that the latest information in TRACnet was correctly uploaded or electronically captured and tallies with what is contained in health facility summary report and district aggregated reports. In addition, the feedback report will outline any issues regarding data quality. These reports also serve as the data source for some national-level indicators.

3.10.4—Community Health Data Quality Assurance

Health centres are responsible for providing technical support in data management and data quality assurance to community health workers. Every month, the FOSA-level CHWs supervisor meets with the CHWs to review the monthly data and provide feedback. At least twice a year, the District Level Data Manager and FOSA-level CHWs Supervisor analyze the performance of all CHWs cooperatives and prepare written feedback reports that are sent to each cell. Before each supervisory visit, the district supervisor and FOSA-level CHWs supervisors should also review data from the SISCom to help determine the performance of the cells and individual agents scheduled to be visited. This information should be discussed with staff during the visits.

In each district, data managers and FOSA-level CHW supervisors should meet once a year for an Annual district health planning meeting. During this meeting, health workers should analyze their data, interpret key trends, plan priority activities, and set targets for the following year.

3.11 – COMPONENT 11: HIV EVALUATION AND RESEARCH

Key Strategies:

- Organize midterm and final reviews/evaluations of the NSP
- Development of a national HIV research agenda (national research and operational research priorities) and implementation of it
- Strengthen the functioning of the research committee
- Strengthen national clinical research
- Conduct special studies on most-at-risk-populations and other vulnerable groups (MSM, migrant workers, people with disabilities, sero-discordant cohabitating couples, men in uniform, prisons)
- Conduct key evaluation studies on program effectiveness

Evaluation and research activities are key components in ensuring that the HIV response is evidence-based

and responding to the appropriate aspects of the HIV epidemic in Rwanda. Epidemiological research linked with ongoing surveillance is critical in assuring that the right populations are being targeted by HIV interventions. Operational research and program evaluations are also necessary to assess the effectiveness of HIV interventions. Some national-level indicators can only be measured through specific research and special studies, making it necessary to ensure that all evaluation and research activities capture the appropriate information needed by the M&E system. It is important to note that some indicators will also use routine reporting data as a secondary source for monitoring progress in the short-term, as special studies are expensive and are typically conducted after longer intervals of time. Results from these special studies and other evaluation and research activities that inform national indicators will be routinely updated into national databases as data becomes available in order to maintain an updated registry of all national results by indicator.

Two main national joint reviews/evaluations of the overall National Strategic Plan will be carried out at mid-term (end 2010) and end-term (2012). The joint reviews will assess progress and achievements of the NSP 2009-2012 as well as make recommendations to reinforce measures for a sustainable multi-sectoral response to HIV/AIDS across the country, address potential problems with the response, and propose how to fill identified gaps. These joint exercises will include key evaluation questions to be jointly agreed on according to country priorities at the time.

The reviews will be carried out under the leadership of the CNLS, and they will involve stakeholders from all sectors in the collection and the analysis of data. Routine data, program reports, and focus discussions with program implementers and with program beneficiaries themselves will be used. The reviews will examine the following areas:

- Progress in implementing the NSP 2009-2012;
- Relevance of the response to the HIV epidemic at the time of the review and needs for changes; and
- Gaps and areas not adequately addressed, and solutions to remedy these gaps in the remaining implementing time for the national strategy (for the mid-term review) and for the subsequent national plan (final review).

Several other specific evaluation and other research studies will be conducted during the implementation of the NSP. The major studies and evaluations areas that will inform national-level indicators for the next four years are:

- Biological and behavioral study on HIV-discordant couples: HIV-discordant couples have been shown to be a major contributor to new infections in Rwanda through the results of recent research and modelling exercises. As such, HIV-discordant couples have been targeted in the NSP as a most-at-risk population for HIV acquisition. Outside of R-DHS 2005 which collected some information on the prevalence of HIV discordance among married couples, little is still known about their individual risk behaviors, such as condom use, and the dynamics of HIV transmission among HIV-discordant couples. A special study to better understand their behaviors and relative risk for HIV will be conducted in the first two years of the NSP.
- Biological and behavioral studies on other most-at-risk populations (MARPs): The NSP 2009–2012 has identified several groups as populations most-at-risk for HIV infection, or MARPs. Though the general strategy should be to regularly monitor these groups through BSS, it is equally necessary to conduct some special studies among these groups in order to determine baseline levels for HIV infection and other behavioral risk factors. Once these baseline levels have been determined in independent special studies, linkages will be made to the national bio-behavioral surveillance system chaired by TRAC Plus to ensure routine monitoring of biological and behavioral trends in these groups for subsequent years. Studies planned for the first two years of implementation include a bio-behavioral study of men who have sex with men (MSM) at the national level.
- Biennial HIV and AIDS Epidemiologic Updates: Every two years, in accordance with the publication of the most recent HIV sentinel surveillance data, the Rwanda Technical Working Group on HIV Estimations and Models generates estimates of the burden of HIV infection in order to inform national strategic and operational planning and to address national and international reporting commitments. The estimates are produced using the Estimation and Projection Package (EPP) and SPECTRUM software packages, and are subsequently published in an epidemiologic update.

- Special study on the unmet need for family planning among HIV+ women: A key strategy in the NSP for the reduction of mother-to-child transmission of HIV is to ensure the availability of quality family planning services to HIV+ women so that they are empowered to make informed reproductive health decisions. This special study will provide a baseline measure of the prevalence of unmet need for family planning among HIV+ pregnant woman in order to set a national targets and increase service provision within the first two years of NSP implementation.
- Rwanda Reproductive Health Commodities (RHC) Quantification Report: The MOH RHC Quantification Committee develops forecasts each year to estimate the current numbers of condoms available for distribution and projection trends over time.
- ART Outcomes Study: The TRACnet system currently doesn't have the capacity to follow individual patients over time in order to analyze patient-level outcomes and trends. In order to measure important trends such as survival on ART, a special study on ART outcomes will be conducted in the first two years of the NSP to serve as a baseline level for national target setting and program planning. By the end of the NSP implementation period, the electronic medical record system should be in place and will subsequently track this information as part of routine reporting at health facilities.
- Impact of cooperatives and associations of PLWHA: The NSP 2009–2012 proposes new and innovative strategies to improve the quality and quantity of socio-economic support services targeting PLWHA associations and cooperatives. As there has been no baseline study to date quantifying socio-economic characteristics of current PLWHA cooperatives and associations, this special study to be conducted within the first two years of NSP implementation will assist in determining baseline levels for certain indicators. These baselines will influence target setting and program planning during NSP implementation. By the end of the NSP period, RRP+ will have developed a robust M&E system which will be capturing this information as part of routine reporting.
- OVC Vulnerability Audit: The identification of OVC at the district level is the integral first step in ensuring that OVC receive appropriate services. Each district has a district register which identifies all OVC who meet the national definitions of orphans or vulnerable children to be targeted for support services from district-level implementers. As there have been several concerns with the accuracy of this register in regards to the actual vulnerability of the children included, this special study aims to measure the accuracy of the identification process by looking at the proportion of OVC recorded in the district register that meet the national definition of "orphan or vulnerable child".
- National Policy Composite Index: As part of reporting requirements for the UN General Assembly Special Session on HIV and AIDS (UNGASS) reports, CNLS conducts a national policy composite index (NPCI) every two years. The NPCI collects information on policy and strategy development and implementation over the past two years, recording detailed responses from government and civil society on areas such as strategic planning, M&E, human rights, political support for HIV response, and civil society involvement in the HIV response. Some of the responses from this index are used for reporting on national indicators.
- Operational research: In order to inform the evidence-based development of new national programs and to better understand operational aspects of existing national programs, operational research on select national programs will be conducted during the NSP implementation period. This includes research on implementation scenarios of male circumcision and progress in the integration of family planning into HIV services.
- HIV, rape and Gender-based violence: The NSP provides a gender-sensitive approach to HIV prevention, care and treatment services and aims to prevent new HIV infections attributed to rape and gender-based violence. Formative research will be conducted during the NSP implementation period in order to better understand the determinants and dynamics of HIV, rape, and gender-based violence; and in order to develop evidence-based programs which address the root causes.

In addition to the studies listed above, several operational research studies and evaluations are planned for NSP implementation to measure the quality and effectiveness of HIV services, including ART adherence and

resistance studies and evaluations of the effectiveness of PMTCT services. These studies help assess the quality of services being implemented in order to identify gaps in service delivery and propose solutions. These studies and evaluations are routinely planned throughout the NSP implementation period.

3.11.1—Research Committee on HIV and AIDS and National Research Agenda

The Research Committee on HIV and AIDS was established in 2006 and is currently chaired by the CNLS. The Research Committee will develop a better coordination mechanism with TRAC Plus, which is charged with HIV clinical research in the country, to assure one national research agenda adopted by all partners conducting research in the country. A formal mechanism will be developed to collect and disseminate the results of research protocols that have been approved by the committee.

The research agenda, defining key priority areas for research and evaluation in the country, will be based on information gaps identified in the new NSP and additionally identified country information needs, including HIV risk among most-at-risk populations, and information on the effectiveness of different HIV interventions. It will be developed in a participatory way. CNLS will also continue to conduct an annual HIV Research Conference and HIV Paediatric Conference where local and international researchers can share their results in national fora. In addition, national-level M&E stakeholders will work with CDLS and other district-level stakeholders to conduct smaller surveys addressing specific knowledge gaps identified by districts. These smaller surveys will focus on skills transfer and capacity building for district-level stakeholders in research methodology, and will contribute to a more evidence-based district level HIV response.

3.12—COMPONENT 12: DATA DISSEMINATION AND USE

Key Strategies:

- Information dissemination
- Data use strategy

The use of data and other evidence to inform sound decision making is the main goal of the M&E system. The M&E system needs to develop data dissemination mechanisms at all levels to ensure that all relevant stakeholders have access to most up-to-date information

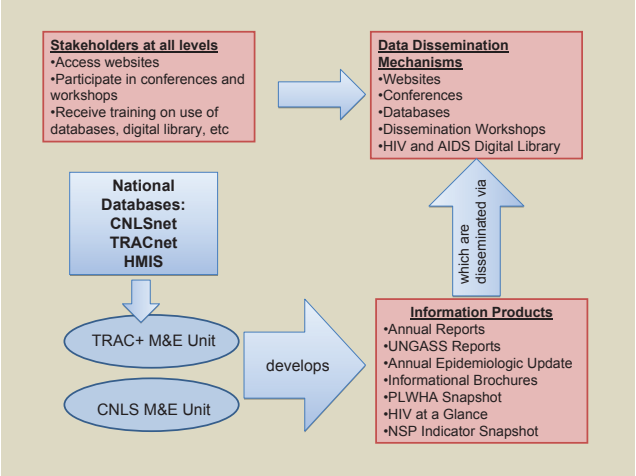

Figure 18—System for Data Dissemination and Use.

available that can influence their program decisions. Data dissemination strategies were developed to ensure that information is not only available, but disseminated to the appropriate stakeholders in a timely manner. The HIV data collected from the different sources described in Components 7 and 8 are used to produce quarterly and annual HIV and AIDS reports that CNLS disseminates to all national and decentralized HIV stakeholders. These reports are in turn important tools for the different partners to inform their planning process on the basis of available evidence. Figure 18 illustrates the various information products and dissemination mechanisms developed as part of this M&E Plan.

Information products include the following:

- HIV and AIDS Annual Report which captures all information on the HIV response including progress reports on meeting HIV targets each year, produced by the CNLS M&E Unit;
- Annual Reports of other HIV stakeholders including TRAC Plus, MOH, civil society umbrella organizations, line ministries of EDPRS sectors, and development partners;
- UNGASS Progress Report is produced every two years and monitors the progress in achieving the concrete, time-bound targets set out in the Declaration of Commitment on HIV and AIDS by the Government of Rwanda and other partners at the 2001 UNGASS on HIV and AIDS;
- Annual Research Journal presents the abstracts and research findings from all research conducted in Rwanda during the year;

- PLWHA Snapshot is a brief report targeted towards policy makers which gives a summary of the status and progress of HIV interventions with associations and cooperatives of PLWHA;
- HIV at a Glance is a brief report which presents a summary of the status and progress of HIV interventions with priority groups for the HIV response, such as MARPs;
- NSP Indicator Snapshot both highlights progress towards national indicators and documents the best practices annually in the HIV response.

The CNLS will also develop other informational bulletins at regular periods to ensure that HIV stakeholders have the most up-to-date information. Focus will be put on district-level data dissemination and use to assure that district-specific data is not only reported to the national level, but is disseminated locally to local HIV stakeholders and used in decision making.

3.12.1—Data Dissemination Mechanisms

The M&E Plan has developed several strategies to increase data dissemination, including the revision of the HIV and AIDS digital library to improve access to HIV data in the country. Major research, surveillance, and programmatic evaluation results will be disseminated and validated through national and district-level workshops and all results will be housed in the HIV/AIDS digital library.

In addition, three national conferences are organized annually to foster the exchange of information and experiences between all HIV stakeholders (Partnership Forum, National Research and Exchange Conference on HIV and AIDS, and the National Paediatric Conference on Children Infected and Affected by HIV and AIDS). Better mechanisms are also under development to disseminate information from the national to decentralized levels. For example, district-level workshops will be organized each year to serve as a forum for district-level stakeholders to share information, best practices, and other research results in their respective districts to better inform decision making.

3.12.2—Data Use Strategies

The main goal of this M&E system is the promotion of the greater use of data and other evidence to inform sound decision-making, thereby resulting into the improvement of services delivery. The primary problem faced at all levels is the huge volume of data that is being collected and not utilized. The initial data use strategy is the review of national and program-level indicators currently being done, and the standardization of the data collection tools and formats to ensure that acceptable and useful data is collected at all levels that will be useful in informing the decision-making process.

The second data use strategy is the institutionalization of feedback mechanisms at all levels of reporting that will not only address data quality issues but also how data can be used to guide in the improvement of quality of care provided. This will involve analysis and interpretation of data (i.e., looking for trends in performance based on agreed targets and analysis of program impact) by the program managers and data analysts at the national level and feeding it back to decentralized entities on a quarterly basis. The feedback mechanism from the national level is designed to gradually improve the ability of the decentralized entities in appreciating the value of information and develop their capacity over time in analyzing and interpreting data for use.

The third data use strategy is building of the capacity of decentralized entities in analyzing and use of data. Through support from partners, CNLS and MOH are developing a guide on using data to improve service delivery. This guide will focus on how health providers, district managers, CDLS, and HIV implementers can conduct self-evaluations using data being collected and use it to improve service delivery and sound decision making.

The fourth data use strategy is the implementation of a system of ranking similar to the health league table that ranks the performance of districts based on selected key indicators. This will prompt district managers to start questioning key data gaps within their databases before the annual rankings are published, thereby increasing regular reviews and use of data. Currently the health sector is collecting data on key indicators through the PBF system and there is the need to begin ranking of district performances. The community-based system is developing a similar mechanism based on data reported to CNLSnet from district-level Results Reports.

4. NATIONAL AND PROGRAM-LEVEL INDICATORS

National (Table 51) and program-level indicators (community-based and health facility-based: Table 52) will be monitored regularly (depending on the indicator type) and made operational at the district level (service delivery level) to ensure adequate data collection at all levels. For each national and program-level indicator, an indicator reference sheet describes the definition, the frequency and level of measurement, the entity responsible for data collection, the source of data, and where pertinent more information about the limitations and interpretation of each indicator. Indicator Protocol Reference Sheets for national and program-level indicators for both the community-based and facility-based M&E system are attached in Annex B.

Table 51—National Indicators

LogF REF	CORE NATIONAL INDICATORS	UNGASS	EDPRS	MDG	GF	PEPFAR	Univ ACCESS
IMPACT INDICATORS (PREVENTION, CARE AND TREATMENT, IMPACT MITIGATION)							
1	HIV prevalence in the population aged 15-24 (disaggregated by sex, age and urban/rural)	✓	✓	✓	✓	✓	✓
2	Percentage of adults and children with HIV known to be on treatment 12 months, 24 months and 36 months after initiation of antiretroviral therapy[1]	✓	✓	✓		✓	
3	Percentage of PLWHA in poverty is not more than the general population		✓				
PREVENTION INDICATORS							
1.1a	Percentage of most-at-risk populations[2] who are HIV-infected	✓				✓	
1.1b	Percent of discordant couples that remain discordant after enrolment to couples' counseling and testing at 12, 24, 36 months			✓			✓
1.1.1a	Percentage of women and men aged 15-49 who reported using a condom the last time they had high risk sexual intercourse (non-married non-cohabitating partner) (disaggregated by age and sex)	✓	✓	✓		✓	✓
1.1.1b	Percentage of young women and men aged 15-24 yrs old, and 18-24 yrs old, who have had sexual intercourse before the age of 15, and 18, respectively	✓				✓	
1.1.1c	Percentage of population aged 15-49 who had more than one sexual partner in the last 12 months (disaggregated by age and sex)	✓				✓	
1.1.1d	Percentage of sero-discordant cohabitating couples reporting consistent and correct condom use during reporting period						
1.1.1e	Percentage of men reporting the use of a condom the last time they had anal sex with a male partner	✓				✓	✓
1.1.1f	Percentage of female sex workers reporting condom use during last sex with a client	✓				✓	

LogF REF	CORE NATIONAL INDICATORS	UNGASS	EDPRS	MDG	GF	PEPFAR	Univ ACCESS
1.1.1g	Percentage of other most-at-risk populations reporting condom use during last sexual intercourse with non-married non-cohabitating partner (disaggregated by risk group)						
1.1.2a	Prevalence of male circumcision among adolescent and adult men (disaggregated by age [10-19, 20+])					✓	
1.1.2b	Proportion of males born in the last 12 months circumcised at a health facility						
1.1.3	Percentage of people reporting suggestive symptoms of STIs and seeking treatment from clinical services (disaggregated by sex)						
1.2	Percentage of HIV+ children born to known HIV+ mothers (at six weeks, five months and 18 months)	✓			✓	✓	
1.2.1	Percentage of HIV+ pregnant women who received antiretroviral therapy to reduce the risk of mother-to-child transmission		✓		✓	✓	✓
1.2.2	Percentage of women of reproductive age attending HIV care and treatment services with unmet need for family planning						
1.3	Percentage of donated blood units screened for HIV in a quality assured manner	✓				✓	
1.1.1.1a	Percentage of population aged 15-49 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission (disaggregated by age [15-24, 15-49] and sex)	✓		✓		✓	✓
1.1.1.1b	Number of couples who have received couples HIV counseling and testing and who know their results in the last 12 months				✓		
1.1.1.3a	Percentage of most-at-risk populations reached with HIV prevention programs (disaggregated by risk population)	✓				✓	✓
1.1.1.3b	Percentage of most-at-risk populations who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission (disaggregated by risk pop.)	✓				✓	
1.1.1.5	Percentage of those testing positive for HIV receiving complete positive prevention package						
1.1.1.6a	Percentage of health facilities with post-exposure prophylaxis (PEP) available				✓	✓	
1.1.1.6b	Percentage of women who are presenting at health facilities who receive PEP according to national guidelines				✓	✓	
1.1.1.7a	Total number of condoms available for distribution nation-wide during the last 12 months				✓		✓
1.1.1.7b	Percentage of young women and men aged 15-24 who report they could get condoms on their own				✓	✓	
1.1.2.1	Percentage of health facilities with staff who can perform male circumcision					✓	

LogF REF	CORE NATIONAL INDICATORS	UNGASS	EDPRS	MDG	GF	PEPFAR	Univ ACCESS
1.1.3.2	Percentage of health centers and hospitals offering STI treatment that have capacity to test for syphilis				✓		
1.2.1.1	Number and percentage of health facilities that provide all four items from minimum PMTCT package				✓		
1.2.2.1	Percentage of health facilities offering integrated family planning services as part of ART				✓		
1.3.1.1a	Percentage of people in the general population reporting that last injection was given with a syringe and needle taken from a new, unopened package					✓	
1.3.1.1b	Percentage of health facilities with safe final disposal methods for sharps and infectious waste			✓		✓	
CARE AND TREATMENT INDICATORS							
2.1	Percentage of people enrolled in HIV care and treatment who received cotrimoxazole (CTX) prophylaxis in the last 12 months				✓	✓	
2.2	Percentage of adults and children eligible for ART receiving it (disaggregated by treatment initiation eligibility criteria [CD4 <200, CD4 <350])			✓	✓	✓	✓
2.3	Percentage of adults who received follow-up adherence assessment and counseling as part of psychosocial support package					✓	
2.1.1.1	Percentage of hospitals and health centers offering full package of HIV services (VCT, PMTCT, ART)				✓		
2.1.1.3a	Percent of HIV-positive patients who were screened for TB in HIV care or treatment settings (at the end of the reporting period)				✓	✓	
2.2.1.1a	Percentage of women and men aged 15-49 who received an HIV test in the last 12 months and who know their results	✓			✓	✓	✓
2.2.1.1b	Percentage of pregnant women who were tested for HIV and know their results				✓	✓	
2.2.1.1c	Percentage of partners of pregnant women in ANC who were tested for HIV in the last 12 months and who know their results				✓		
2.2.1.1d	Percentage of health facilities offering Provider-Initiated treatment (PIT)				✓		
2.2.1.2	Percentage of children of HIV+ mothers who received an HIV test at 18 months				✓	✓	
2.2.1.4	Percentage of viral load suppression after 12 months of treatment						
2.3.1.1	Number of PLHA who received at least one home visit and/or palliative care service in last 12 months				✓		
2.3.1.2	Number of PLHA in need benefiting from nutritional support in the last 12 months				✓	✓	
IMPACT MITIGACTION INDICATORS							
3.1	Percentage of PLHA who have gone at least one day without food				✓		

LogF REF	CORE NATIONAL INDICATORS	UNGASS	EDPRS	MDG	GF	PEPFAR	Univ ACCESS
3.2	Percentage of OVC aged 0-17 whose households received free basic external support in caring for the child	✓	✓		✓	✓	✓
3.3	Percentage of PLHA who report fear of being physically harassed and/or threatened						
3.1.1.1	Percentage of PLHA who have no formal education						
3.1.1.2	Percentage of PLHA who are unemployed or not working at all						
3.1.1.3	Percentage of cooperative members applying for credit who accessed credit mechanism per year				✓		
3.2.1.1.a	Percentage of OVC who meet national criteria for vulnerability that are in district registers				✓		
3.2.1.1b	Current school attendance among orphans and non-orphans aged 10-14	✓		✓	✓		✓
3.3.1.1a	Laws are protective of the rights of persons infected/affected by HIV					✓	
3.3.1.1b	System for officially documenting cases of stigma and discrimination exist						
3.3.1.2	Number of PLHA receiving legal aid services				✓		
3.3.1.3	Percentage of population expressing accepting attitudes in relation to people living with HIV						
3.3.1.4	Percentage of PLHA who confronted, challenged or educated someone who was stigmatizing and/or discriminating them						

Formula: Known to be on treatment after 12 months of initiation – documented death – lost to follow up – stopped treatment

1. Female Sex Workers (FSW), Mobile Populations, Men Who Have Sex with Men (MSM), Prisoners.
2. HIV testing with pre- and post-test counseling, ARV prophylaxis for the mother and newborn, counseling on infant feeding, and family planning counseling or referral.

Table 52—Program-Level Indicators

LogF REF	Program-Level Indicators	UNGASS	EDPRS	MDG	GF	PEPFAR	Univ ACCESS
COMMUNITY-BASED INDICATORS							
Prevention							
D1	Number of people in the targeted population reached through community outreach with at least one HIV information, education, communication or behavior change communication message					✓	
D2	Number of youth reached with HIV information, education, communication or behavior change communication through HIV youth Club (Club anti-SIDA)					✓	✓
D3	Number of Most-at-Risk Populations (MARP) reached by HIV prevention interventions					✓	✓
D4	Number of district level implementers with the minimum capacity to deliver quality HIV prevention services to MARP.					✓	
D5	Percentage of health facilities that offer referral services for victims of sexual or gender-based violence (SGBV)					✓	
D6	Number of condom points of sale in the district						
Care and Treatment							
D7	Percentage of ART sites with an affiliated Community-based Organizations supporting PLWHA					✓	✓
D8	Number of PLWHA visited by community volunteers/health workers/staff					✓	
Impact Mitigation							
D9	Number of PLWHA who received secondary support services						
D10	Number of associations and cooperatives of PLWHA per district					✓	
D11	Number of OVC receiving services as part of the National Minimum Package of services						
FACILITY-BASED INDICATORS							
Pre ART Indicators							
F1	Total number of new patients enrolled in the care and treatment program			✓	✓	✓	✓
F2	Cumulative total number of HIV positive patients in the care and treatment program			✓	✓	✓	✓
F3	Number of HIV positive patients who receive prophylactic cotrimoxazole					✓	
F4	Number of new HIV positive patients to whom TB screening was done this month				✓		
F5	Number of new HIV positive patients to whom TB screening was positive this month				✓	✓	
F6	F6. Number of HIV positive patients assisted by the care and treatment service who have started TB treatment (including TB sufferers newly enrolled)				✓	✓	✓

LogF REF	Program-Level Indicators	UNGASS	EDPRS	MDG	GF	PEPFAR	Univ ACCESS
ART Indicators							
F7	Number of new patients who started ART during the reporting month				✓	✓	
F8	Cumulative total number of patients who are currently under ART				✓		
F9	Percentage of HIV positive patients under first line regimen				✓		
F10	Number of HIV positive patients under the second line regimen				✓	✓	
F11	Number of patients to whom CD4 count was done in the last six months						
STIs and Other Opportunistic Indicators							
F12	Number of STI cases treated this month				✓		
F13	Number of cases of opportunistic infections treated, excluding TB, this month				✓	✓	
F14	Number of HIV positive clients (15 years+) to whom cervix cancer was detected				✓		
Nutrition							
F15	Percentage of HIV positive children with severe malnutrition at the level of care and treatment service				✓	✓	✓
F16	Percentage of HIV positive children (<5 years) who have received nutritional or treatment supplement						
F17	Number of HIV positive patients with malnutrition who have received treatment or nutritional supplement						

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