

Planning for Sustainable HIV/AIDS Services using the HAPSAT Tool

Arin Dutta, PhD and Lisa Fleisher, MPH
Health Systems 20/20 Project

Global Health Council Conference 2008
May 27, 2008



Abt Associates Inc.

In collaboration with:

- | Aga Khan Foundation | BearingPoint
- | Bitrán y Asociados | BRAC University
- | Broad Branch Associates
- | Forum One Communications | RTI International
- | Training Resources Group
- | Tulane University's School of Public Health

Objectives of Workshop

- We hope workshop attendees will:
 - become familiar with sustainability analysis for HIV/AIDS
 - become familiar with the HAPSAT interface
 - be able to enter basic scenarios into HAPSAT and interpret results
 - develop an interest in using HAPSAT for program design and/or research

Overview Part I

- What is Sustainability Analysis
- What is HAPSAT
- HAPSAT Implementation: Zambia

Definition of Sustainability

- ***Sustainability*** refers to the ability of a country's HIV program to mobilize resources – especially domestic – to provide HIV/AIDS services efficiently at a desired scale and quality over time
- **What is required for a sustainable program?**
 - Secured funding (financing salaries, drugs, supplies, etc.)
 - Secured human resources (service deliverers)
 - Strong processes and organization

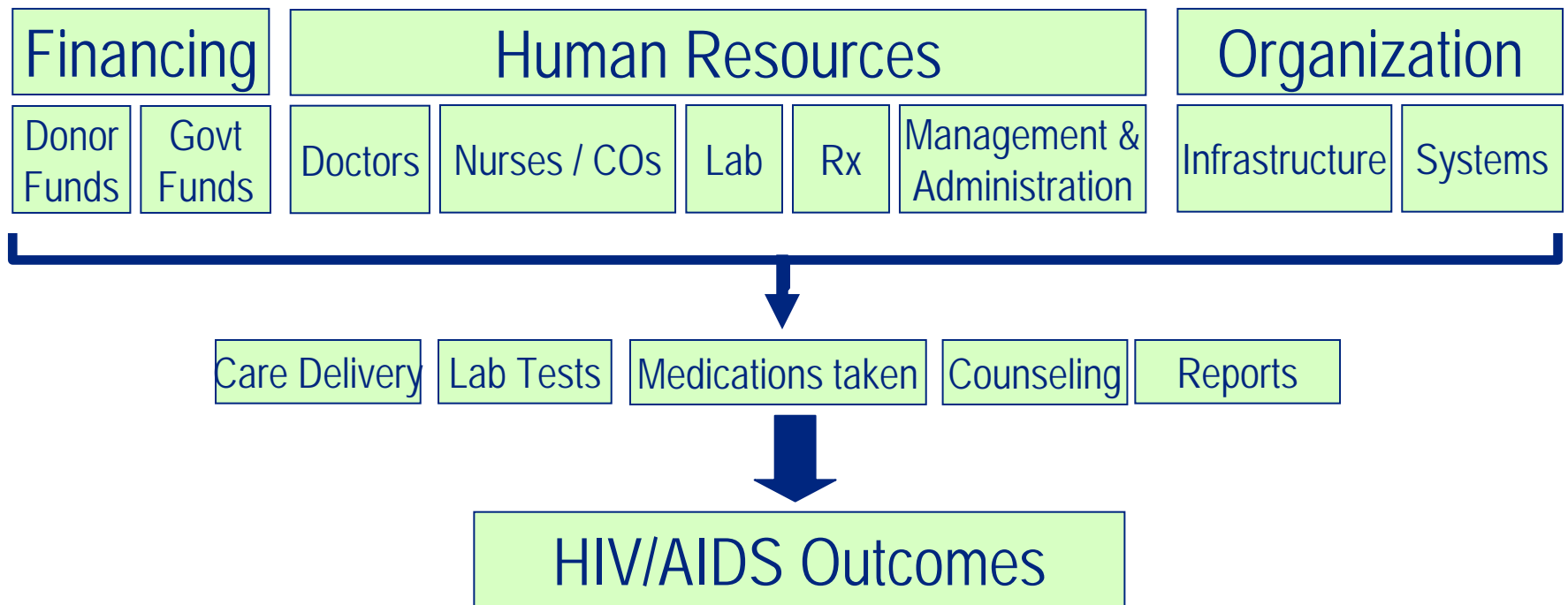
What is Sustainability Analysis?

- Sustainability analysis gauges the capacity of a health system to deliver HIV/AIDS services over time
- Primary focus: gap between *resources needed* (financial, human, and organizational) and *resources available* over the relevant time horizon
- What can be measured more easily: *funds, people*
- What is measured less easily: well-functioning program management (e.g., generate accurate strategic information routinely, efficient organizational systems)

Why is Sustainability Important?

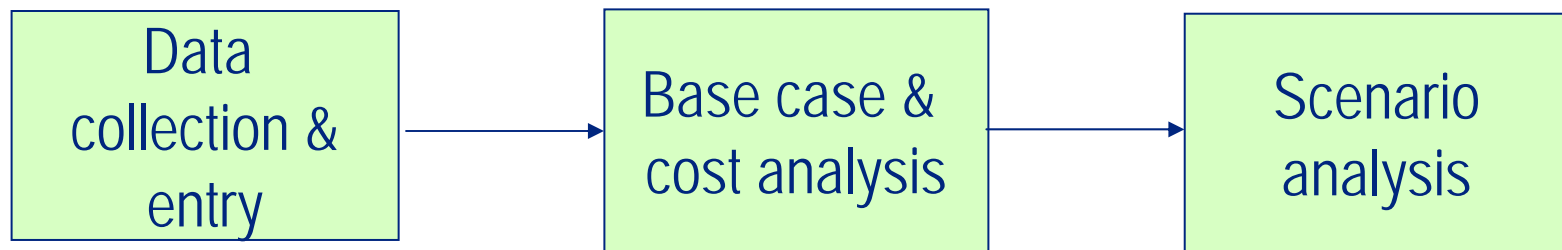
- More money now for health than ever before...
 - ~ US\$17bn in 2006
 - Will the funding last?
 - What happens if donors shift priorities and/or decrease funding levels?
- ...but significant gaps still remain
- Absorptive capacity a major constraint
 - Africa must triple health workforce to meet health MDGs
- HIV as a chronic disease has implications for resources, especially treatment

Inputs (resources) Sustain Outputs, Outputs Sustain Outcomes



HIV/AIDS Program Sustainability Analysis Tool (HAPSAT)

- HAPSAT is a MS-Excel tool for analyzing the *sustainability of HIV/AIDS services* over a 3-15 year time horizon, with three logical steps:



1. **Data Collection & Entry:** HAPSAT comes with forms and guides for data collection, and an intuitive interface for data entry
2. **Base Case Setup & Analysis:** Analyze the current program's costs and resource intensity, identify current gaps
3. **Scenario Analysis:** Explore the sustainability of target coverage in different contexts. Identify bottlenecks, develop policy recommendations

Data Collection: Inputs for HAPSAT Analysis & Sources

| Data for setting up the Base Case: | In-country document review | Validation |
|------------------------------------|--|--------------|
| Demographic and epidemiological | Yes | X |
| Financing | Yes, donor surveys in-country | X |
| Scale of HIV/AIDS services | Yes, MoH reports | Site surveys |
| Health workers stock & flows | Yes, MoH payroll data | X |
| Resources used per patient visit | Maybe. Or WHO guidelines | Site surveys |
| Current unit costs | Yes. Procurement records, payroll, distributor price lists | X |

| | |
|----------------------------------|---|
| Program Goals for the Scenarios: | Government input, PEPFAR or MDG targets |
|----------------------------------|---|

If country-level data is hard to get, you can substitute regional-level data

Key Questions HAPSAT Analysis Answers

COSTS and RESOURCE ALLOCATION

- How much does the current HIV/AIDS Program cost?
- How are resources allocated across an HIV/AIDS program?

GAP ANALYSIS

- What are expected future resource gaps for maintaining *current or target* volume of services?
- What are the key bottlenecks and when do they appear over time?

GAP ANALYSIS: OTHER FINANCING SCENARIOS

- What would be the implications of particular donors reducing their financial commitments?

What Are the Comparative Advantages of using HAPSAT?

- Measures the **sustainability** of an HIV/AIDS program over time: this involves *estimating and projecting* the cost and the human resources required to run the program
- Has a high level of detail on the resource “ingredients” (e.g. staff hours, cost of lab tests, specific drug regimens, etc).
- Is complementary to other costing models (i.e. GOALS) which:
 - projects epidemiological trends
 - estimates the **impact** of HIV/AIDS program resource allocation decisions

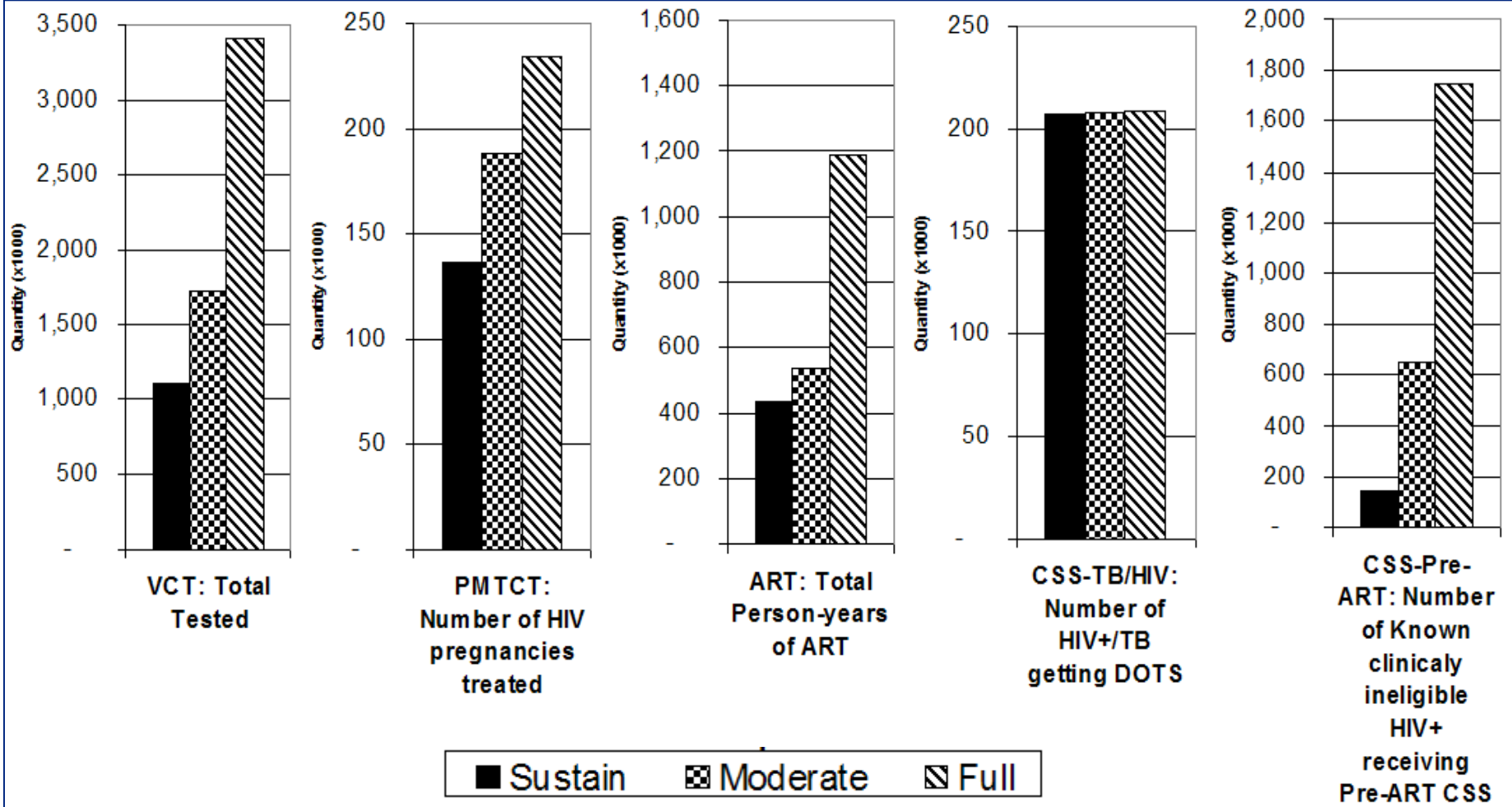
HAPSAT Implementation: Zambia

- Data collection occurred in 2007
- Joint design of the data collection and analysis with our country counterparts
- Now in dissemination
- First instance of HAPSAT implementation
 - Leading to country-level policy recommendations
 - Resource mobilization strategies

HAPSAT Model: Zambia Scenarios

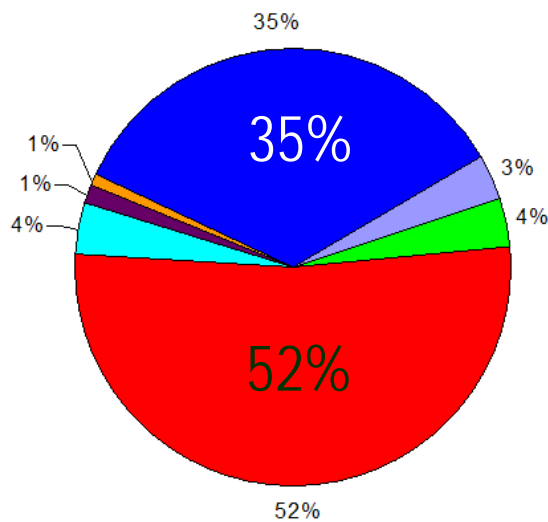
- **Modelling Assumptions used in this analysis**
 - 5 year time horizon 2007-2011
 - Unit costs do not change for time or coverage
 - No discounting of future costs
 - *HIV incidence not affected by modeled interventions (i.e., testing and ART do not impact transmission)*
- **Three alternative HIV/AIDS program scenarios**
 - **SUSTAIN** current level of services
 - **MODERATE SCALE-UP** of services
 - **FULL COVERAGE** of eligible populations

Scenarios: HIV Program 5-year Cumulative Output

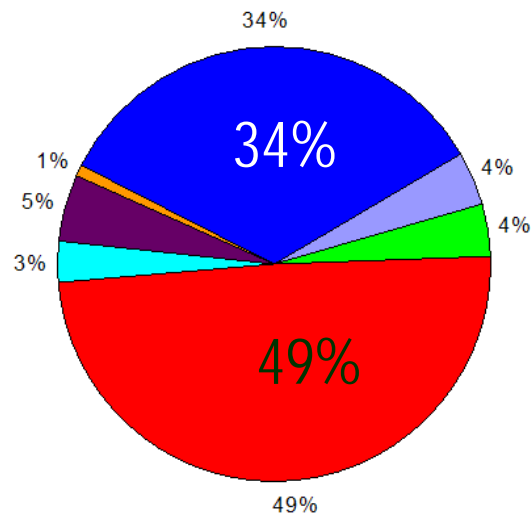


Cost Analysis: Contribution of Each Service to Total Costs (2007-2011)

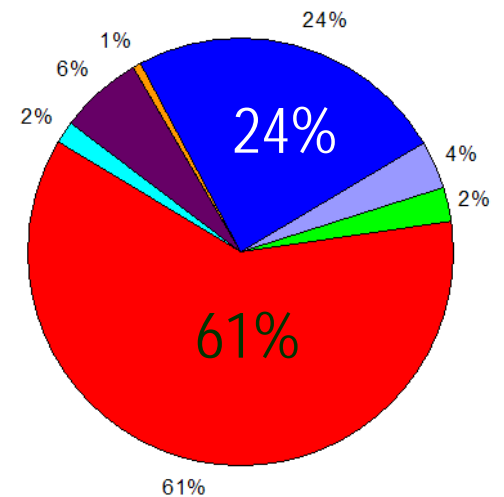
Sustain



Moderate Scale-up



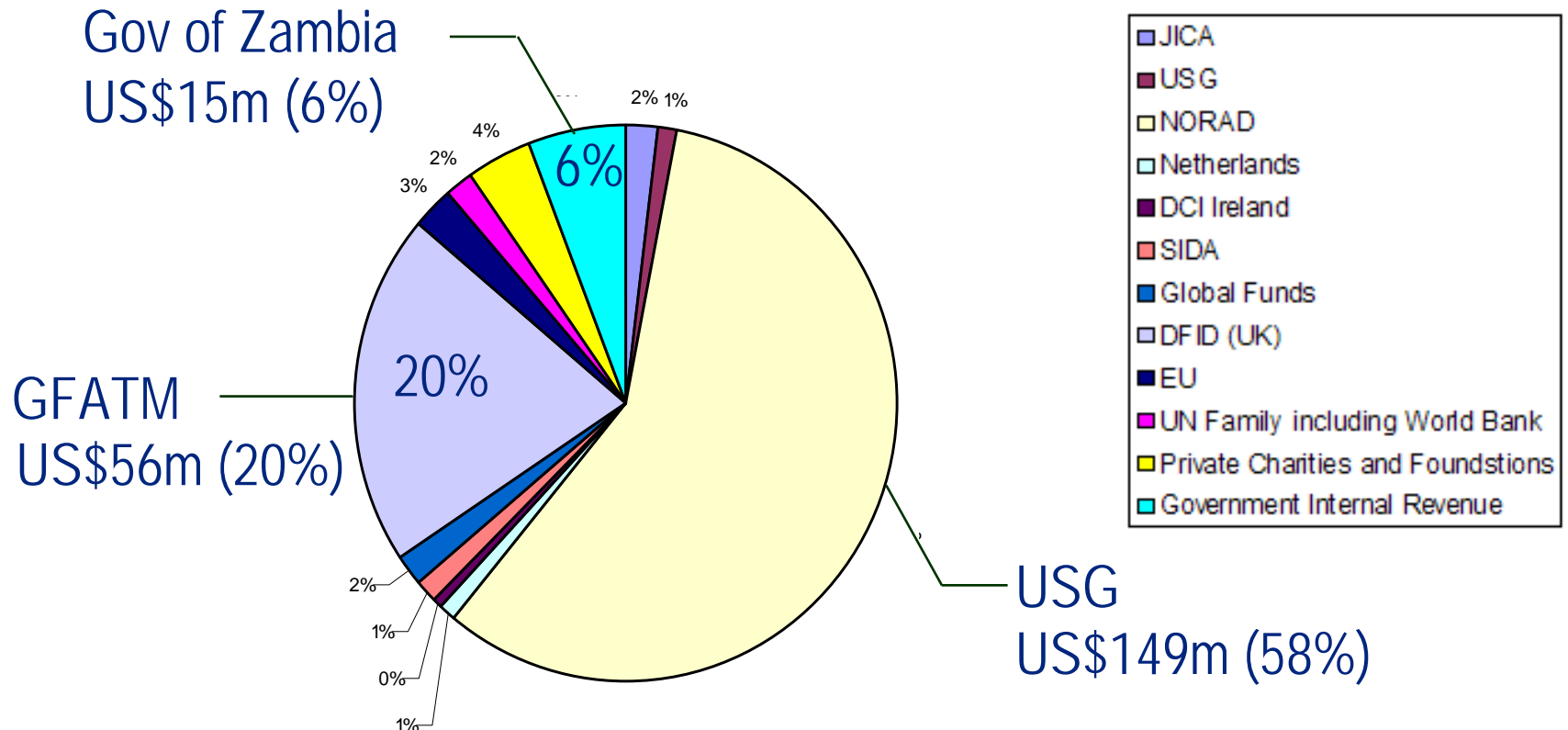
Full coverage



HAPSAT Inputs – Zambia

Anticipated Funding Support for HIV/AIDS Program

Estimated Financial Resources for 2007

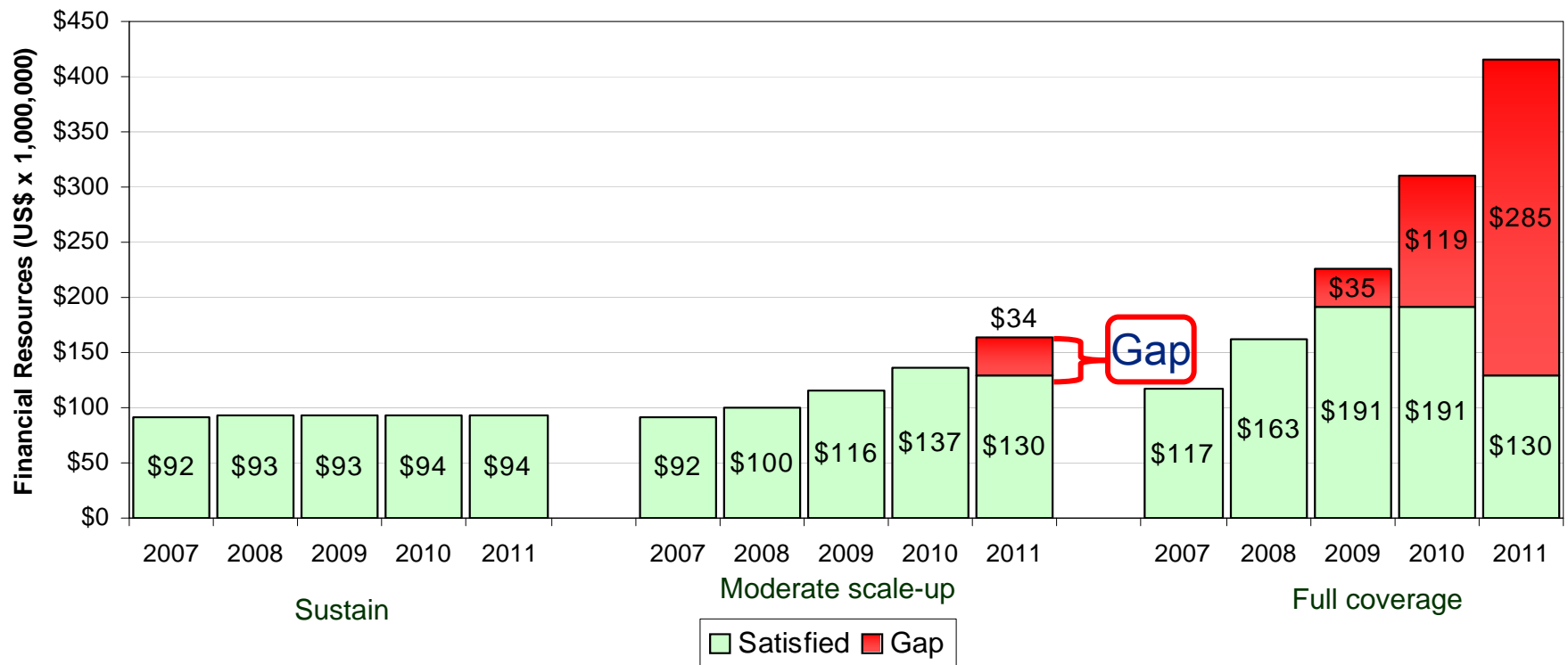


Source: NAC (NASF 2006-2010)

Note: Donor funding represents commitments, not disbursements.

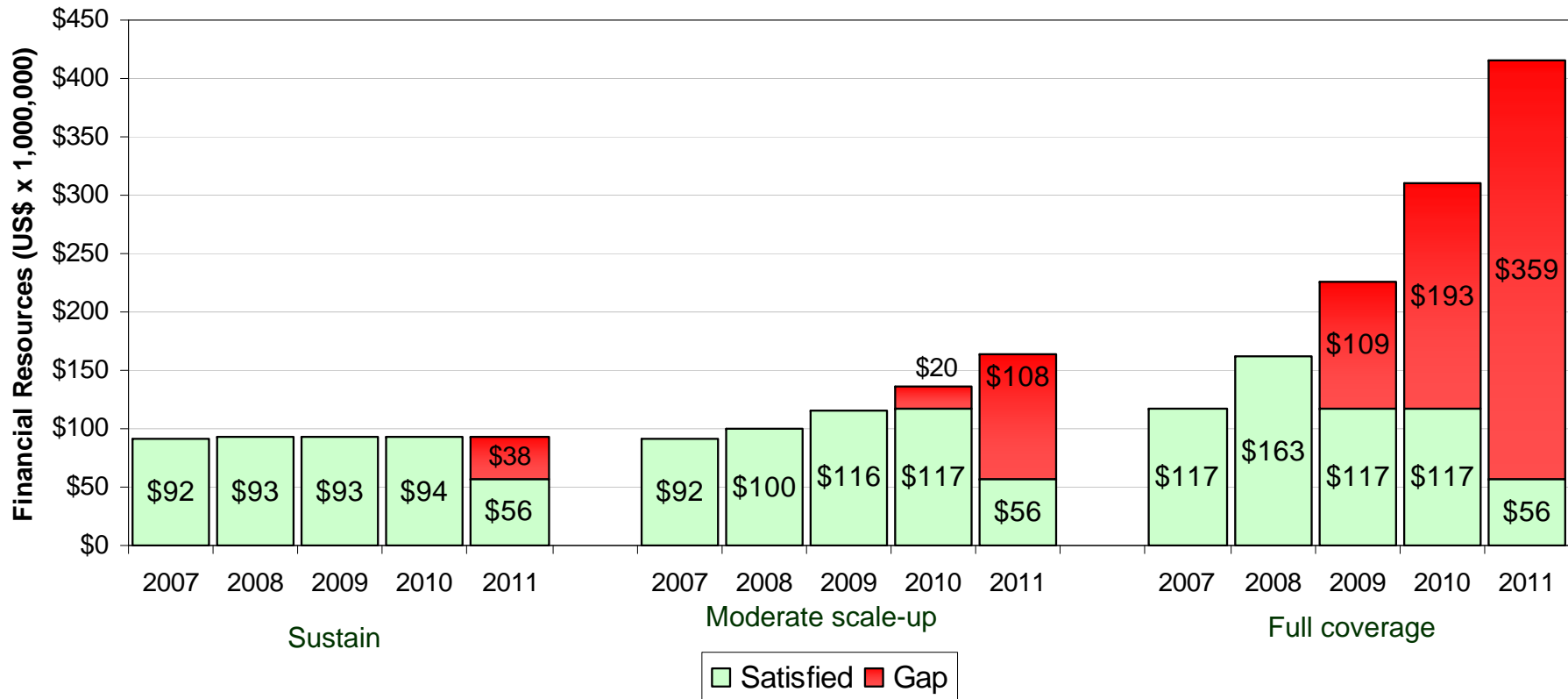
Results of Gap Analysis: Funding, All Scenarios (1)

Funding Gaps for ART, PMTCT, VCT, TB-HIV, CSS, and prevention in the **base case analysis**



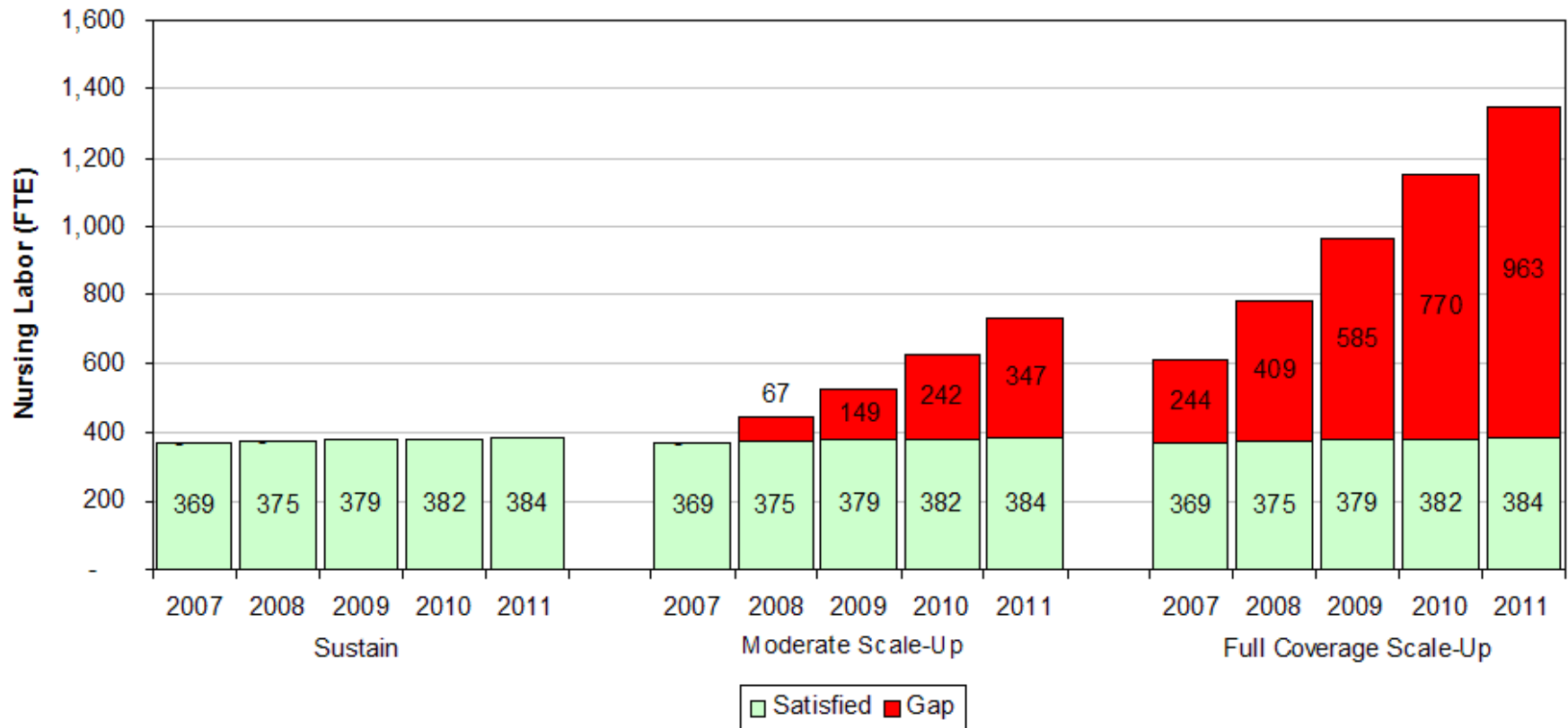
Results of Gap Analysis: Funding, Donor Effects (2)

Funding Gaps for ART, PMTCT, VCT, TB-HIV, CSS, and prevention in the absence of PEPFAR after 2008 or GFATM after 2010



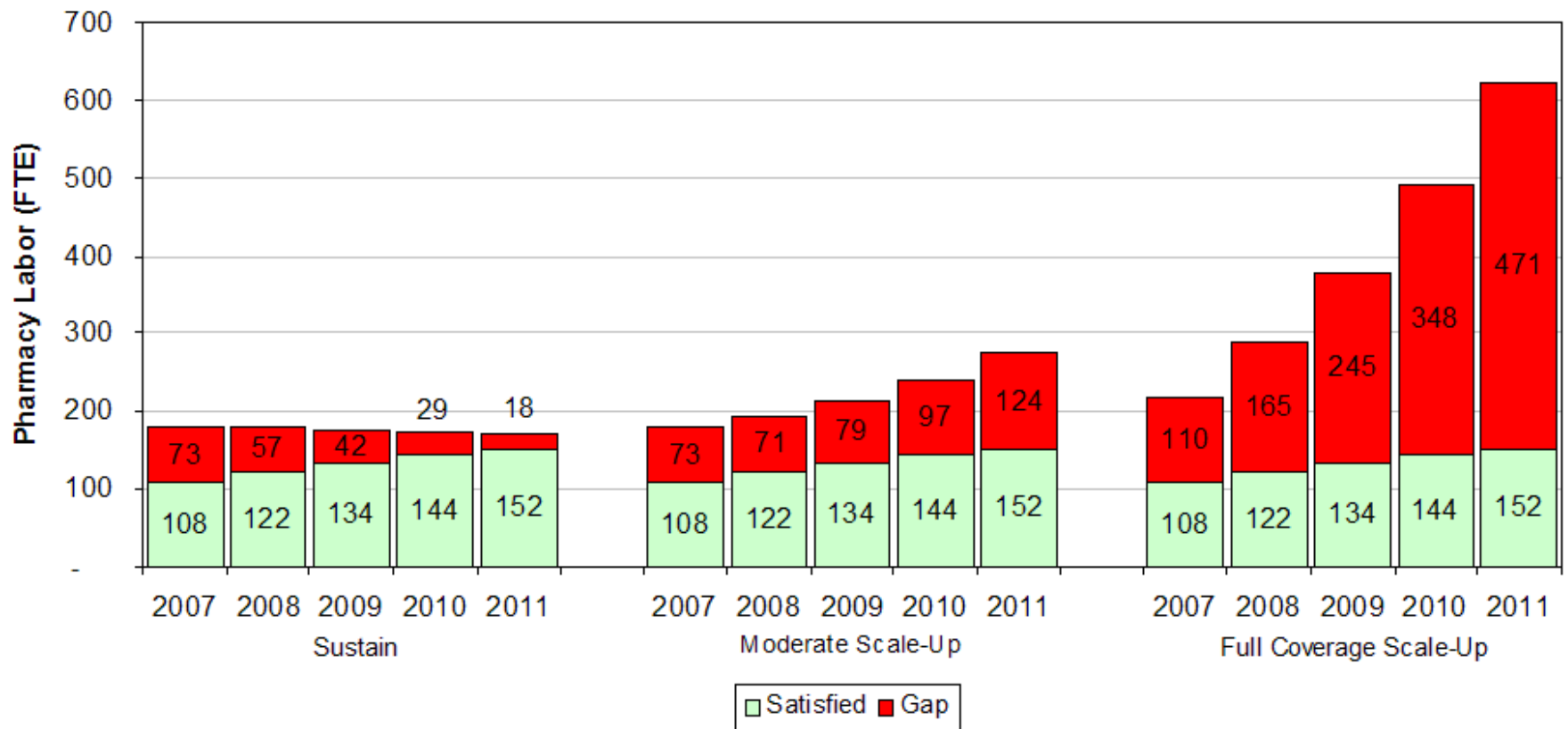
Results of Gap Analysis: Human Resources (a)

Nursing Gaps for ART, PMTCT, VCT, TB-HIV, and CSS



Results of Gap Analysis: Human Resources (c)

Pharmacist Gaps for ART, PMTCT, VCT, TB-HIV, and CSS



Interpreting results: Illustrative findings

- Total cost of sustaining services at 2007 levels is estimated at \$92 million annually with 52% for ART
- In 2007, PEPFAR and the Global Fund provided 78% of the funding for the national HIV/AIDS program
 - Only 6% of funding came from domestic sources
- Human resources more constrained than financial resources
 - To achieve moderate scale-up by 2011, the health workforce will have to increase by at least 347 nursing FTE, 484 laboratory FTE, and 124 pharmacy FTE.

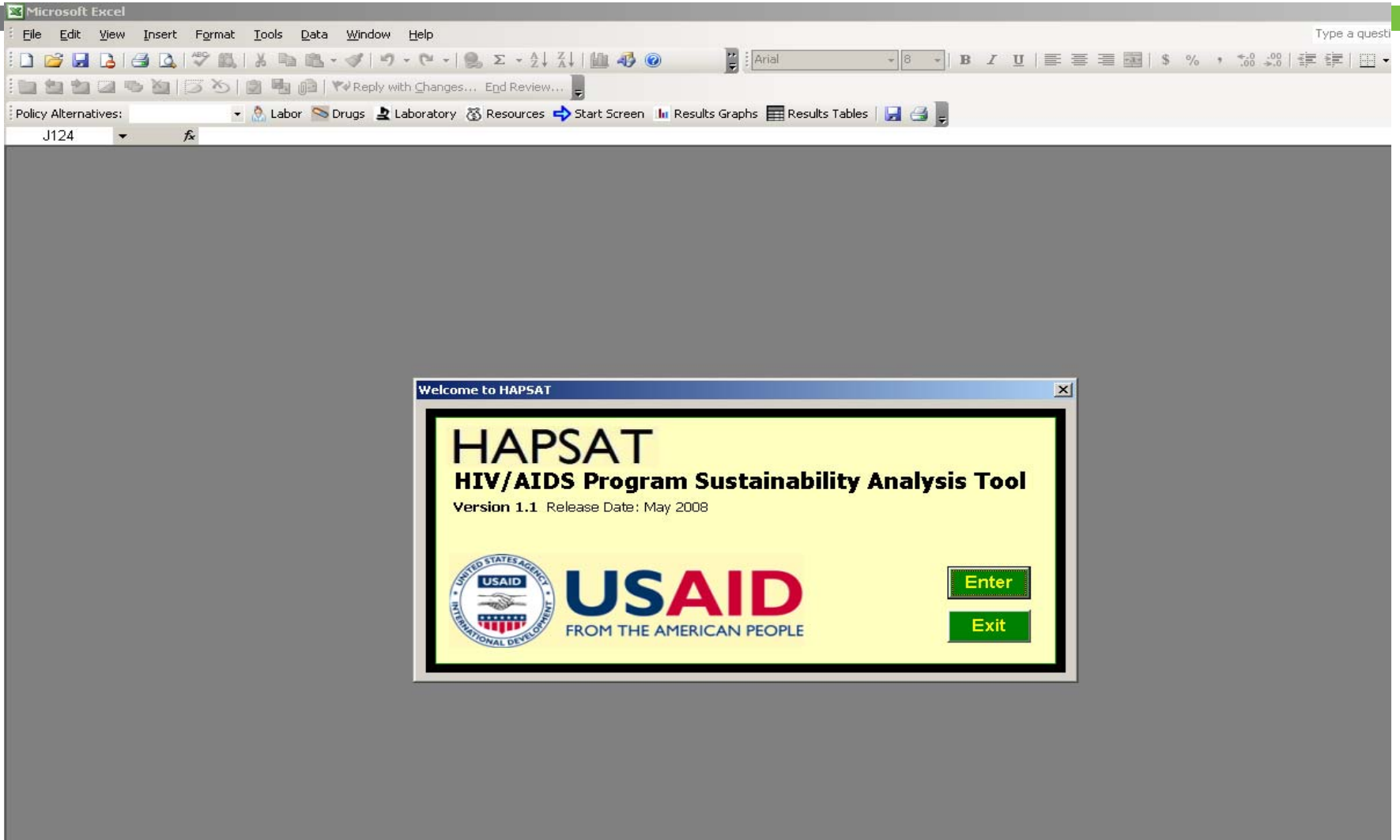
Interpreting Results: Policy Recommendations

- Renewed donor commitments are required to sustain or scale up services unless internal resources can be mobilized
- Programs such as PMTCT should receive high-priority for scale-up owing to its relative technical simplicity, low-cost, and large benefits
- Efforts to scale up services should:
 - Address the human resource constraints
 - Build organizational capacity for efficient service delivery (e.g. develop HIS and processes to ensure efficiency in service delivery and reduced need for external technical assistance)

Overview Part II

- HAPSAT tutorial using base case
- Distribution of materials
- Set up for teams

Please Turn to HAPSAT



The image shows a screenshot of a Microsoft Excel spreadsheet. The spreadsheet is mostly blank, with a few cells containing text like "Policy Alternatives:", "Labor", "Drugs", "Laboratory", "Resources", "Start Screen", "Results Graphs", and "Results Tables". A dialog box titled "Welcome to HAPSAT" is open in the center of the screen. The dialog box has a yellow background and contains the following text:

HAPSAT
HIV/AIDS Program Sustainability Analysis Tool
Version 1.1 Release Date: May 2008

Below the text is the USAID logo, which includes the text "UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT" and "USAID FROM THE AMERICAN PEOPLE". To the right of the logo are two green buttons: "Enter" and "Exit".

Thank you

Reports related to this presentation
are available at www.HS2020.org



Abt Associates Inc.

In collaboration with:

- | Aga Khan Foundation | BearingPoint
- | Bitrán y Asociados | BRAC University
- | Broad Branch Associates
- | Forum One Communications | RTI International
- | Training Resources Group
- | Tulane University's School of Public Health