



The RAPID Model:

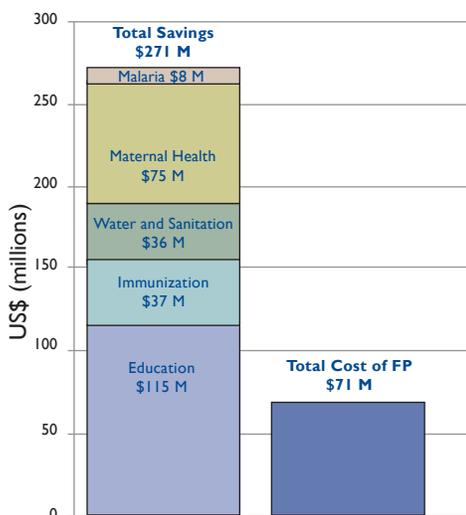
An Evidence-based Advocacy Tool to Help Renew Commitment to Family Planning Programs

With the emergence of other health and development priorities, family planning and reproductive health (FP/RH) programs have experienced waning donor and government support. Concerted, evidence-based advocacy is needed to renew commitment to and increase resources for FP/RH programs. The RAPID Model is a computer-based tool that stakeholders can use to demonstrate the effect of rapid population growth on different sectors and the benefits of FP programs.

Why Support Family Planning?

Continued rapid population growth adds to the demand for food, jobs, housing, energy, and health and education services, making it more difficult for developing countries to achieve their national socioeconomic goals, including the Millennium Development Goals (MDGs). Facing these challenges, countries must consider: What can be done to improve the health of individuals and societies?

Figure 1. Social Sector Cost Savings and Family Planning Costs in Kenya, 2005–2015



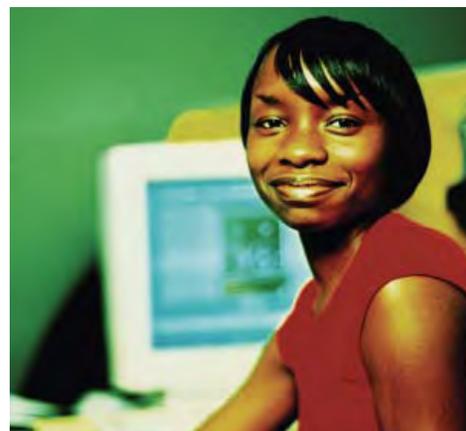
Source: Health Policy Initiative, Task Order 1. 2006. "Achieving the MDGs: The Contribution of Family Planning—Kenya." Washington, DC: Futures Group International.

Helping couples achieve their desired family size, in part, through family planning (FP) leads to benefits at the individual, household, and societal levels. A study of 16 sub-Saharan African countries estimated that satisfying unmet need for family planning would save the lives of 122,000 mothers and avert the deaths of 5.9 million children from 2005–2015 (contributing to MDGs 4 and 5).¹ Family planning delays the first birth, prevents unintended pregnancies, reduces abortions, and promotes proper birth spacing. This gives women time to recover between pregnancies and promotes infant survival. Healthier women and smaller families lead to healthier children and more household resources available for each family member, helping to create a path out of poverty (MDG 1). Moreover, FP programs contribute to HIV prevention (MDG 6) by counseling at-risk clients and promoting condom use.

Even with high rates of economic growth, many countries cannot meet their populations' needs. Furthermore, the growing demand for arable land, clean water, and other natural resources leads to resource depletion. Family planning use can help alleviate the cycle of rapid population growth, environmental degradation, and inadequate food and living conditions (MDG 7). Slower population growth also reduces the burden on health (MDGs 4–6), education (MDG 2), and social welfare systems, freeing up resources for other needs. For example, if Kenya were to invest an additional US\$71 million for family planning from 2005–2015, it could gain a net savings of about \$200 million in health, education, and other sectors (Figure 1).

What Is the RAPID Model?

RAPID is one of the computer models contained in the SPECTRUM Suite of Policy Models, designed by the Futures Group International with support from USAID.



Box 1. Using RAPID: The Process

- Engage interested stakeholders
- Build in-country capacity to gather data and use the model
- Collect and input data
- Analyze different scenarios and indicators of interest
- Disseminate findings
- Foster policy dialogue
- Identify recommendations / next steps
- Supplement the findings with additional tools as needed (e.g., costing tools)

RAPID helps in-country stakeholders manipulate data to analyze different scenarios and encourage policy dialogue about the effect of population factors on socioeconomic development (Box 1).

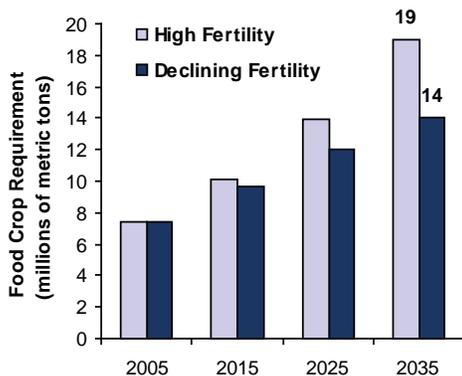
What Does RAPID Do?

Developed in 1978, RAPID has been continually improved and updated with the latest information. The model combines socioeconomic indicators—such as labor force participation, primary school enrollment, and number of nurses per capita—with demographic information and population projections to estimate impacts up to 30 years into the future. Different scenarios are projected so that policymakers can compare the consequences if the country/region continues to have high fertility vs. the benefits of reducing fertility, in part, through FP programs. As RAPID is easily tailored to the country or region, users can analyze specific indicators of interest, such as migration, urbanization, fuel wood consumption, or water use.

RAPID presentations and booklets, based on the analyses, convey key information to policymakers in a concise, user-friendly manner. The model can be used with diverse audiences (e.g., senior decisionmakers, budget planners, religious leaders); for various sectors (e.g., environment, health, education, economy); and at different levels (e.g., national, decentralized).

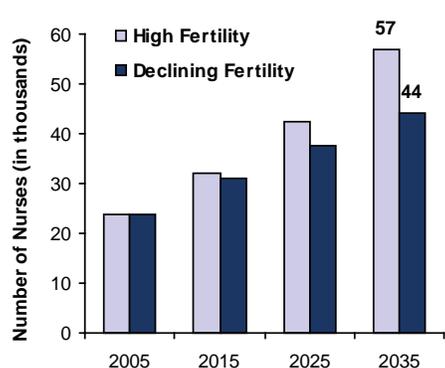
Figures 2 and 3 illustrate the types of projections stakeholders can make using RAPID. For example, in Rwanda, malnutrition is a leading cause of death among women and children. Nearly half of children under age five face chronic malnutrition (45%).² In 2004, the country produced 6.7 million metric tons of food crops. Under the high fertility projection, Rwanda would need to nearly triple its food

Figure 2. Projected Food Crop Requirements in Rwanda, 2005–2035



"High fertility" assumes the total fertility rate (TFR) remains at 6.1. "Declining fertility" assumes the TFR declines from 6.1 in 2005 to 2.3 in 2035.

Figure 3. Projected Nurses Required in Tanzania, 2005–2035



"High fertility" assumes the TFR declines from 5.7 in 2005 to 5.0 in 2035. "Declining fertility" assumes the TFR declines from 5.7 in 2005 to 2.2 in 2035.

crop production to 19 million metric tons by 2035 just to maintain the same per capita food crop production as existed in 2004 (Figure 2). Even with declining fertility, production would still need to double, to 14 million metric tons over the 30-year period. Both scenarios present significant challenges. However, meeting food and nutrition needs will be even more difficult if rapid population growth continues.

Similarly, Tanzania is facing a severe health worker shortage. In 2002, the country had only one nurse per 1,520 people. To maintain even this inadequate staffing level, Tanzania would need to more than double the number of nurses by 2035 if high fertility continues. Declining fertility could reduce the severity of the nursing shortage (Figure 3). In 2005, the Ministry of Health reported that only about one-third of medical officer positions and about one-quarter of assistant medical officer and public health nurse positions were actually occupied. Thus, if rapid population growth continues, Tanzania—which is already struggling to fill health posts—will have a harder time keeping up with demand in the future.

RAPID Spearheads Policy Change

RAPID analyses have been presented to cabinet-level officials in more than 40 countries, including 15 heads of state. In many countries, advocacy using RAPID has led to policy and programmatic change.

Rwanda. Following Rwanda's 1994 genocide, family planning remained a taboo subject, as many people wished to rebuild their families. Despite losses, Rwanda is the most densely populated country in Africa and rapid population growth threatens both household and societal development. Beginning in the mid-2000s, Rwanda stepped up efforts to address the issue of rapid population growth. Many stakeholders attribute changes in political commitment and attitudes toward family planning, in part, to the RAPID analysis (see Box 2). Since 2005, the model has been presented to Parliament, Ministry of Health officials, and others. In February 2007, the Minister of Health presented RAPID findings to

Box 2. RAPID in Rwanda

"[RAPID] had a powerful impact because it put a positive spin on things by talking about the advantages of having smaller families in terms of improved health and education opportunities ... The RAPID Model brought home the idea that the goals of poverty reduction simply could not be met with high rates of population growth, and that lowering fertility—in part through family planning—was essential."

Source: Solo, J. 2008. *Family Planning in Rwanda: How a Taboo Topic Became Priority Number One*. Chapel Hill, NC: IntraHealth.

the President and members of the Cabinet, sparking presidential-level commitment for family planning. The government subsequently designed a National Family Planning Strategy, included FP programs in Rwanda's Vision for 2020, and created an FP technical working group. Use of modern contraceptives among married women has increased dramatically, from 10 percent in 2005 to 27 percent in 2008.³

Tanzania. The Population Planning Unit under the Planning Commission of the President's Office is leading dissemination of the RAPID analysis in Tanzania. RAPID has been presented to senior policy and planning officers from nearly all central ministries, 108 members of parliament, journalists, and religious leaders. RAPID is also being used to increase FP support and resources at the decentralized level. To date, planning officers, health officials, and statisticians from 34 districts across six regions have been trained to use RAPID to conduct district-specific analyses of population trends, health, the environment, and other issues. Moreover, attitudes toward family planning are changing among influential community leaders. In 2008, the Christian Council of Tanzania and National Muslim Council issued statements in support of family planning and birth spacing. Increased commitment at district and community levels will help lay the foundation for slower population growth and improved health and development outcomes for Tanzanian families and the society.

For More Information

The RAPID Model and user manual are available to download at <http://www.healthpolicyinitiative.com/index.cfm?id=software&get=Spectrum>.

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ENDNOTES

¹ Moreland, S., and S. Talbird. 2006. *Achieving the Millennium Development Goals: The Contribution of Fulfilling Unmet Need for Family Planning*. Washington, DC: Futures Group International, POLICY Project.

² Rwanda 2005 Demographic and Health Survey.

³ Preliminary data from Rwanda's 2008 Demographic and Health Survey.