



Rwanda

This brief presents the current status of Rwanda’s health system in comparison with systems in the sub-Saharan Africa region and other low-income countries. Additionally, it provides an overview of the Rwandan health system’s strengths and weaknesses, and looks at the challenges that currently affect the country’s HIV/AIDS and malaria programs.

Rwanda, a low-income country in Central Africa, with a gross domestic product (GDP) of \$250 per capita, continues to recover from a tumultuous history of colonization in the 19th century, a long

period of political conflict, and a series of violent outburst resulting from ethnic strife, including the 1994 genocide. As the country recovers from these events, its population faces challenges in health similar to other sub-Saharan African countries, especially in maternal and child health, HIV/AIDS, malaria, and human resources for health.

Donors have taken great interest in ameliorating Rwanda’s problems, in the health sector and beyond. The World Bank estimates that in 2004 Rwanda received \$297 million in donor aid,¹ which equaled 17% of its \$1.8 billion GDP.² With its HIV prevalence rate of 3.1% among those in the 15-49 age group and with 9 of 10 people at risk for malaria, Rwanda is a focus country for the President’s Emergency Plan for AIDS Relief, from which it received about \$71 million in FY 2006,³ and the President’s Malaria Initiative, from which it received about \$17 million for FY 2007.⁴ Rwanda’s Ministry of Health (MoH) is tackling the health sector problems through its Health Sector Strategic Plan 2005-2009.⁵ The current health status of the population suggests an urgent need for further efforts.



Photo by: Marni Laverentz

Only one out of three births in Rwanda are attended by skilled health personnel compared to one out of two in other sub-Saharan Africa countries.

Health Systems Country Briefs assess a country’s health system to identify “best buys” for health systems strengthening – limited investments in health systems activities that are certain to realize important gains. Information in this Brief comes from review of secondary data sources, country reports, and communication with country experts. Data for comparisons with peer countries come from internationally comparable datasets of the World Bank, World Health Organization, and others; where more recent data are available from the country, those data are used.

TABLE 1: RWANDA HEALTH SYSTEM – STRENGTHS AND WEAKNESSES

Health System Function	Data/Evidence	Strengths and Weaknesses
Health Financing	<ul style="list-style-type: none"> ● Household out-of-pocket expenditures on health in 2003 accounted for 42% of total private health expenditures. ● Rwanda scaled up community-based health insurance coverage, to more than 51% of its population. 	<p>Strengths:</p> <ul style="list-style-type: none"> ● Donor support is increasing, especially for HIV/AIDS and malaria. ● Government and donors support innovative programs, such as performance-based financing. ● Rwandans are relatively better protected from out-of-pocket spending on health. <p>Weaknesses:</p> <ul style="list-style-type: none"> ● Per capita spending on health is low in absolute terms. ● The entire population is not covered by the existing health insurance schemes. ● Information on distribution of financial and human resources across the population is limited.
Governance	<ul style="list-style-type: none"> ● Rwanda ranks in 34th percentile of countries on government effectiveness, higher than the average rank for its regional and income-group peers. ● Rwanda performed best in the control of corruption, where it ranked in the 44th percentile (as compared to 29th for sub-Saharan Africa and 24th for other low-income countries). 	<p>Strengths:</p> <ul style="list-style-type: none"> ● Rwanda has a Health Sector Strategic Plan for 2005-2009, as well as other programs and policies. ● Rwanda has a donor coordination mechanism in place. <p>Weaknesses:</p> <ul style="list-style-type: none"> ● It is difficult to determine whether implementation and monitoring of these programs and policies happen in a timely manner. ● Public information from the MoH is not transparent.
Service Delivery	<ul style="list-style-type: none"> ● In 2001 85% of the population lived within 1.5 hours of a primary health unit. ● A significant percentage of health services are delivered through the private sector. 	<p>Strengths:</p> <ul style="list-style-type: none"> ● Performance-based financing programs have improved the quality of health services. <p>Weaknesses:</p> <ul style="list-style-type: none"> ● Only about half of health centers or dispensaries have regular electricity and year-round onsite water access. ● There are many barriers to access to health care: poor infrastructure, geography, affordability. ● Vertical service delivery systems do not provide a long-term, sustainable solution.
Human Resources	<ul style="list-style-type: none"> ● Physician density is only 5 per 100,000 compared to World Health Organization recommendation of 20 per 100,000. ● In 2004, Rwanda had a total of only 401 physicians. ● In 2001, most physicians were trained in neighboring countries. 	<p>Strengths:</p> <ul style="list-style-type: none"> ● Output-based financing, or performance-based financing, establishes a system of incentives for health professionals to provide quality medical services. <p>Weaknesses:</p> <ul style="list-style-type: none"> ● Severe shortage of trained health professionals. ● Special problems with retention of physicians. ● Inadequate systems to improve training and recruitment.
Health Information Systems	<ul style="list-style-type: none"> ● Rwanda participates in a variety of surveys, including the Demographic and Health Surveys. ● The most recent year of data on maternal mortality ratio is 2000, from the 2006 World Health Report. 	<p>Strengths:</p> <ul style="list-style-type: none"> ● Rwanda has donor support for health information systems. <p>Weaknesses:</p> <ul style="list-style-type: none"> ● There is inadequate data management and dissemination, and integration of multiple systems (for example, systems track only HIV/AIDS information vs. general health information).

HEALTH SYSTEM STRENGTHS AND WEAKNESSES

Rwanda's health system is based on a primary health care approach and is organized in three tiers, with the MoH responsible for setting policy and overall health sector planning. This organization resulted from the decentralization process that was started in 1985, but was severely disrupted by the violent events of the 1990s. As Rwanda recovers from political turmoil, the MoH continues to support decentralized management.⁶ Since 2003, the Rwandan government has supported performance-based financing strategies at the district level.⁷ In this arrangement, district health offices remunerate health centers and their staff based on their performance in service delivery.⁸ In 2006, 23 out of 30 districts used performance-based financing in their health centers, resulting in improved staff productivity and higher quality of services.⁹ Rwanda also scaled up community-based health insurance, increasing coverage from 7% to 51% of the population between 2003 and 2006.¹⁰

According to the 2006 World Health Report, Rwanda is still highly dependent on donor funding. Although the government's expenditure on health increased between 1999 and 2003, donor spending on health accounted for 55% of total health spending in 2003.¹¹ Moreover, Rwanda has a significantly higher dependence on donors in the health sector than do other sub-Saharan and low-income countries. In 2003, donor spending was, on average, 16% of total health spending in sub-Saharan Africa and 18% in low-income countries.

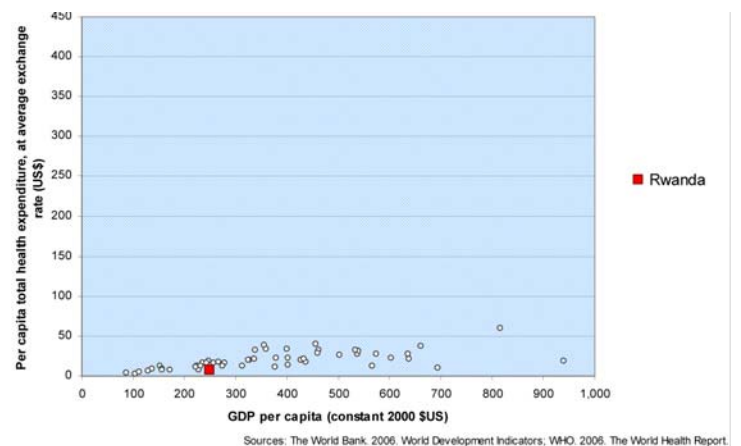
Rwandans' health status suggests that further investments in health and the health system are necessary. In 2004, the life expectancy at birth of 44 years in Rwanda was less than the sub-Saharan Africa average of 49 years and the average of 53 years in low-income countries. Only one out of three births are attended by skilled health personnel compared to one out of two in sub-Saharan Africa and other low-income countries. Furthermore, the fertility rate is high, at 5.6 (compared to 5.2 for sub-Saharan Africa and 4.9 in other low-income countries). In 2004, the under-5 mortality rate was also high, at 203 per 1,000 (compared to 151/1,000 in sub-Saharan Africa and 131/1,000 in other low-income countries).

These health status indicators (see Annex I for complete list) provide the context for the health systems strengths and weaknesses summarized in Table I. Five health systems functional areas (health financing, governance or stewardship, health service delivery, human resources, and health information systems) are discussed in greater detail below.

HEALTH FINANCING

Rwanda lags behind its sub-Saharan Africa neighbors and other countries in the low-income category in total health expenditure and per capita health expenditure. In 2003, Rwanda's total health expenditure was 3.7% of GDP while sub-Saharan Africa's was 4.9% of GDP and low-income countries' was 5.2% of GDP. Rwanda's per capita total health expenditure was only \$7, while sub-Saharan Africa's was \$49 and low-income countries' was \$26.

FIGURE 1: PER CAPITA TOTAL HEALTH EXPENDITURE FOR RWANDA AND LOW-INCOME COUNTRIES



In Rwanda, 55% of health expenditures come from donor-funded private organizations, private firms, and households. Rwanda's public expenditures in health are 44%, similar to those of sub-Saharan Africa and of other low-income countries (50% and 46%, respectively). According to the 2003 National Health Accounts (NHA), households contribute 17% of total health expenditure.¹² Household out-of-pocket expenditures are relatively low as a percentage of private expenditure in health (42% in 2003). This is about half the average for sub-Saharan Africa and for other low-income countries (81% and 85%, respectively).¹³

According to the 2003 NHA, 60% of household out-of-pocket health expenditures were used to purchase health services from private providers (16% private for-profit hospitals, 17% private clinics, 3% traditional healers, 24% pharmacists). The remaining 40% of household out-of-pocket health expenditures were used in the public sector (25% in public hospitals and health centers, and 15% in government-assisted not-for-profit hospitals and health centers).¹⁴

GOVERNANCE

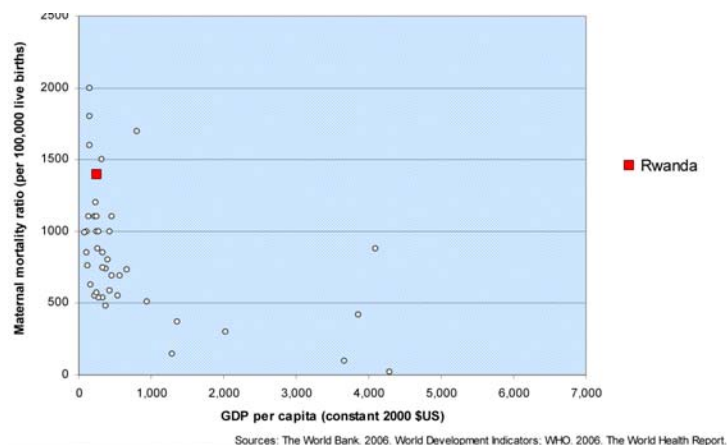
The World Bank's 2004 Worldwide Governance Indicators¹⁵ evaluate countries based on five governance characteristics. The voice and accountability percentile rank indicates the extent to which citizens participate in selecting their government. Political stability describes the perceptions of the likelihood that a country's government will be destabilized or overthrown by unconstitutional or violent means. Government effectiveness indicates the quality of public services and of the civil service. Regulatory quality refers to the government's ability to formulate and implement sound policies and regulations. The rule of law describes the extent to which citizens have confidence in and abide by the rules of society. Finally, the control of corruption indicates the extent to which public power is exercised for private gain.¹⁶

Rwanda scored in the bottom 20% of the countries surveyed for voice and accountability, political stability, and rule of law, while sub-Saharan Africa and other low-income countries scored, on average, in the bottom 30% of the countries surveyed. However, Rwanda performed much better than its sub-Saharan African and other low-income country peers in government effectiveness and regulatory quality, where it scored better than one third of the countries surveyed. For government effectiveness and regulatory quality, other sub-Saharan Africa and other low-income countries were in the lowest 20–25% of countries surveyed. Rwanda performed best in the control of corruption, where it performed better than 44% of the countries surveyed, in contrast to sub-Saharan Africa and other low-income countries, which ranked in the bottom third. As shown by these indicators, Rwanda has seen success in several governance areas, although it has room for improvement in all of them.

SERVICE DELIVERY

In terms of service delivery indicators, Rwanda compares favorably with its sub-Saharan Africa and low-income peer countries. For example, in 2004, 9 of 10 children received DPT3 immunization. This is significantly higher than in sub-Saharan Africa and other low-income countries, where only 7 of 10 children received DPT3 immunization. Similarly, 9 of 10 pregnant women received at least one antenatal care visit in Rwanda, in comparison to 8 of 10 in sub-Saharan Africa and 7 of 10 in other low-income countries. In contrast, the maternal mortality ratio in 2000 was much higher than in sub-Saharan Africa and other low-income countries (1,400 per 100,000 live births, compared to 855 and 738, respectively).

FIGURE 2: MATERNAL MORTALITY RATIO FOR RWANDA AND SUB-SAHARAN AFRICA



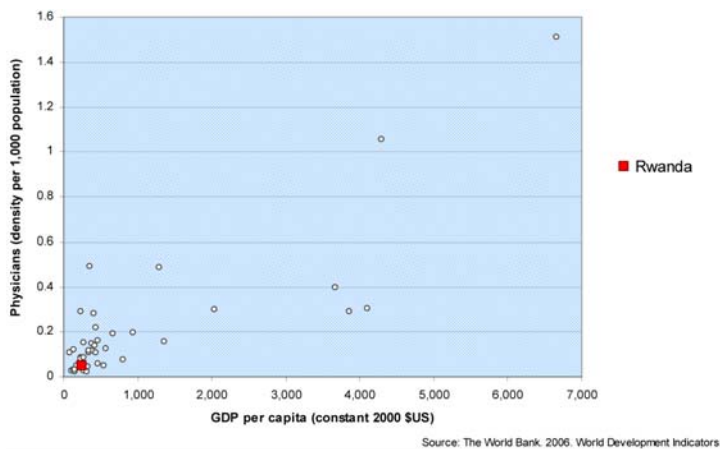
In the public sector, the central level is responsible for developing health policy and the strategic and technical framework within which health services are provided. Rwanda has 11 provincial health offices. In 2001, the peripheral level had 30 district health offices, each composed of an administrative office, a district hospital, and primary health care facilities. At the end of 2001, Rwanda's public sector had 365 peripheral health facilities, out of which 252 were health centers and 113 were health posts and dispensaries. Functioning hospitals are not always present in health districts. According to 2001 information, religious groups and non-profit associations managed 40% of these primary and secondary health facilities. The private sector has been growing constantly since 1995. In 1999, Rwanda had 329 private health facilities, with more than 50% located in or near the capital, Kigali.¹⁷

HUMAN RESOURCES

Rwanda is experiencing a severe shortage of human resources.¹⁸ After the 1994 genocide, Rwanda suffered from a significant out-migration of health professionals. According to data from the 2006 World Health Report, the country continues to face a shortage of health professionals, having in 2004 only 401 physicians and a physician-to-population ratio of 5 per 100,000 as compared with 19 per 100,000 in sub-Saharan Africa and 42 per 100,000 in other low-income countries, and much lower than WHO's recommendation of 20 per 100,000.

Given the current health status of the population and the country's high burden of HIV/AIDS and malaria, human resources for health needs are very likely to continue increasing. Additionally, the distribution of human resources may also be challenging, as funding for HIV/AIDS and malaria will attract professionals from other medical specialties. Therefore, Rwanda has to invest significant effort in creating incentives for professionals to remain in the country and to work where they are most needed, not only according to where resources are concentrated.

FIGURE 3: PHYSICIAN DENSITY FOR RWANDA AND SUB-SAHARAN AFRICA



HEALTH INFORMATION SYSTEM

Health information systems are crucial for evidence-based decision-making and priority setting. Rwanda receives financial support from the Health Metrics Network's Round One in 2007-2008.¹⁹ Rwanda has also received U.S. support to strengthen its Human Resource Information System.²⁰ Rwanda benefits from the information collected through the Demographic Health Surveys. Rwanda's MoH needs an ongoing supply of trained health information system professionals.

RECOMMENDED BEST BUYS

Institutionalize local capacity building in health financing. The MoH suffers high staff turnover; as a result, USAID resources are used to repeatedly train new staff, and the ministry is unable to effectively spend and account for to donors and civil society the tremendous influx of health resources. Incorporating a health financing course into public health or finance programs would institutionalize local capacity to replicate USAID-supported health financing innovations such as performance-based financing, community-based health insurance, and National Health Accounts, and to sustain PEPFAR and PMI interventions.

Establish an integrated database warehouse for health. Rwanda has no shortage of data, but with myriad donor partners (including PEPFAR and PMI) and studies – some of them overlapping – the MoH struggles to organize and later access the data created. To improve efficiency and access, a “knowledge base” for health care should be developed to:

- Pool all datasets and information systems on an accessible data management platform;
- Maintain a widely accessible and current list of ongoing studies;
- Integrate studies to avoid redundancies. For example, add expenditure questions to a Malaria Indicator Survey rather than conduct a separate household survey for NHA; and
- Integrate data sets such as the Public Expenditure Review and NHA to streamline routine data collection/analyses.

ANNEX I: KEY HEALTH SYSTEM INDICATORS FOR RWANDA AND PEER COUNTRIES

Health systems data	Country level data	Year of data	Average value for regional comparator ¹	Year of data	Average value for income group comparator ^{2,3}	Year of data	Source of data	
			Sub-Saharan Africa		Low-income economies			
	Rwanda		SSA		LI			
Core Module								
Indicator 1	Population, total	8,882,365	2004	14,785,627	2004	39,904,246	2004	The World Bank. 2006. World Development Indicators.
Indicator 2	Population growth (annual %)	1.41	2004	2.22	2004	2.19	2004	The World Bank. 2006. World Development Indicators.
Indicator 3	Rural population (% of total)	79.86	2004	63.02	2004	67.40	2004	The World Bank. 2006. World Development Indicators.
	Urban population (% of total)	20.14	2004	36.98	2004	32.60	2004	The World Bank. 2006. World Development Indicators.
Indicator 4	Contraceptive prevalence (% of women ages 15-49)	13.20	2000	23.36	-	26.25	-	The World Bank. 2006. World Development Indicators.
Indicator 5	Fertility rate, total (births per woman)	5.60	2004	5.24	2004	4.89	2004	WHO. 2006. The World Health Report.
Indicator 6	Pregnant women who received 1+ antenatal care visits (%)	93.00	2001	79.71	-	74.25	-	WHO. 2006. The World Health Report.
	Pregnant women who received 4+ antenatal care visits (%)	10.00	2001	51.42	-	46.49	-	WHO. 2006. The World Health Report.
Indicator 7	Prevalence of HIV, total (% of population aged 15-49) ⁴	3.10	2005	8.44	2003	4.76	2003	The World Bank. 2006. World Development Indicators.
Indicator 8	Life expectancy at birth, total (years)	43.92	2004	49.07	-	53.27	-	The World Bank. 2006. World Development Indicators.
Indicator 9	Mortality rate, infant (per 1,000 live births)	118	2004	93	2004	84	2004	The World Bank. 2006. World Development Indicators.
Indicator 10	Mortality rate, under-5 (per 1,000)	203	2004	151	2004	131	2004	The World Bank. 2006. World Development Indicators.
Indicator 11	Maternal mortality ratio (per 100,000 live births) ⁵	1,400	2000	855	2000	738	2000	WHO. 2006. The World Health Report.
Indicator 12	GDP per capita (constant 2000 US\$)	250	2004	879	2004	373	2004	The World Bank. 2006. World Development Indicators.
Indicator 13	GDP growth (annual %)	4.00	2004	5.06	-	5.49	-	The World Bank. 2006. World Development Indicators.
Indicator 14	Per capita total expenditure on health at international dollar rate	32.00	2003	103.58	2003	72.74	2003	WHO. 2006. The World Health Report.
Indicator 15	Private expenditure on health as % of total expenditure on health	56.50	2003	49.99	2003	53.81	2003	WHO. 2006. The World Health Report.
Indicator 16	Out-of-pocket expenditure as % of private expenditure on health	41.70	2003	81.10	2003	84.67	2003	WHO. 2006. The World Health Report.
Indicator 17	Gini index	NA	2002	40.19	-	38.23	-	The World Bank. 2006. World Development Indicators.
Governance Module								
Indicator 1	Voice and accountability							
	<i>Point estimate</i> ⁶	-1.1	2004	-0.6	2004	-0.8	2004	The World Bank. Governance Indicators: 1996-2004.
	<i>Percentile rank</i> ⁷	18.90	2004	31.84	2004	27.52	2004	The World Bank. Governance Indicators: 1996-2004.
Indicator 2	Political stability							
	<i>Point estimate</i> ⁶	-0.9	2004	-0.6	2004	-0.8	2004	The World Bank. Governance Indicators: 1996-2004.
	<i>Percentile rank</i> ⁷	18.90	2004	32.67	2004	25.88	2004	The World Bank. Governance Indicators: 1996-2004.
Indicator 3	Government effectiveness							
	<i>Point estimate</i> ⁶	-0.6	2004	-0.8	2004	-0.9	2004	The World Bank. Governance Indicators: 1996-2004.
	<i>Percentile rank</i> ⁷	33.70	2004	26.54	2004	21.96	2004	The World Bank. Governance Indicators: 1996-2004.
Indicator 4	Rule of law							
	<i>Point estimate</i> ⁶	-0.9	2004	-0.8	2004	-0.9	2004	The World Bank. Governance Indicators: 1996-2004.
	<i>Percentile rank</i> ⁷	21.30	2004	26.84	2004	22.57	2004	The World Bank. Governance Indicators: 1996-2004.
Indicator 5	Regulatory quality							
	<i>Point estimate</i> ⁶	-0.4	2004	-0.7	2004	-0.8	2004	The World Bank. Governance Indicators: 1996-2004.
	<i>Percentile rank</i> ⁷	36.90	2004	28.70	2004	24.63	2004	The World Bank. Governance Indicators: 1996-2004.
Indicator 6	Control of corruption							
	<i>Point estimate</i> ⁶	-0.4	2004	-0.7	2004	-0.8	2004	The World Bank. Governance Indicators: 1996-2004.
	<i>Percentile rank</i> ⁷	44.30	2004	29.17	2004	24.12	2004	The World Bank. Governance Indicators: 1996-2004.

Indicator 1	Total expenditure on health as % of GDP	3.70	2003	4.89	2003	5.18	2003	WHO. 2006. The World Health Report.
Indicator 2	Per capita total health expenditure, at average exchange rate (US\$) ⁸	7	2003	49	2003	26	2003	WHO. 2006. The World Health Report.
Indicator 3	Government expenditure on health as % of total government expenditure	7.20	2003	9.07	2003	8.68	2003	WHO. 2006. The World Health Report.
Indicator 4	Public (government) spending on health as % of total health expenditure	43.50	2003	50.01	2003	46.19	2003	WHO. 2006. The World Health Report.
Indicator 5	Donor spending on health as % of total health spending	54.50	2003	15.93	2003	18.26	2003	WHO. 2006. The World Health Report.
Indicator 6	Out-of-pocket expenditure as % of private expenditure on health	41.70	2003	81.10	2003	84.67	2003	WHO. 2006. The World Health Report.
Service Delivery Module								
Indicator 1	Number of hospital beds (per 10 000 population)	NA	2004	6	-	26	-	WHO. 2006. The World Health Report.
Indicator 2	Percentage of births attended by skilled health personnel per year	31.30	2000	51.74	-	47.57	-	The World Bank. 2006. World Development Indicators.
Indicator 3	DTP3 immunization coverage: one-year-olds immunized with three doses of diphtheria, tetanus toxoid (DTP3) and pertussis (%)	89.00	2004	71.48	2004	73.40	2004	WHO. 2006. The World Health Report.
Indicator 4	Contraceptive prevalence (% of women ages 15-49)	13.20	2000	23.36	-	26.25	-	The World Bank. 2006. World Development Indicators.
Indicator 5	Pregnant women who received 1+ antenatal care visits (%)	93.00	2001	79.71	-	74.25	-	WHO. 2006. The World Health Report.
Indicator 6	Life expectancy at birth, total (years)	43.92	2004	49.07	-	53.27	-	The World Bank. 2006. World Development Indicators.
Indicator 7	Mortality rate, infant (per 1,000 live births)	118	2004	93	2004	84	2004	The World Bank. 2006. World Development Indicators.
Indicator 8	Maternal mortality ratio (per 100,000 live births) ⁵	1,400	2000	855	2000	738	2000	WHO. 2006. The World Health Report.
Indicator 9	Prevalence of HIV, total (% of population aged 15-49) ⁴	3.10	2005	8.44	2003	4.76	2003	The World Bank. 2006. World Development Indicators.
Human Resources Module								
Indicator 1	Physicians (density per 1,000 population)	0.05	2004	0.19	-	0.42	-	WHO. 2006. The World Health Report.
Indicator 2	Nurses (density per 1,000 population)	0.42	2004	1.21	-	1.14	-	WHO. 2006. The World Health Report.
Indicator 3	Midwives (density per 1,000 population)	0.01	2004	0.09	-	0.22	-	WHO. 2006. The World Health Report.
Indicator 4	Pharmacists (density per 1,000 population)	0.03	2004	0.09	-	0.08	-	WHO. 2006. The World Health Report.
Indicator 5	Lab technicians (density per 1,000 population)	0.00	2004	0.10	-	0.07	-	WHO. 2006. The World Health Report.
Pharmaceutical Management Module								
Indicator 1	Total expenditure on pharmaceuticals (% total expenditure on health)	21.30	2000	27.53	2000	27.04	2000	WHO. 2004. The World Medicines Situation.
Indicator 2	Total expenditure on pharmaceuticals (per capita at average exchange rate) in US\$	3	2000	9	2000	5	2000	WHO. 2004. The World Medicines Situation.
Indicator 3	Government expenditure on pharmaceuticals (per capita at average exchange rate) in US\$	1	2000	6	2000	2	2000	WHO. 2004. The World Medicines Situation.
Indicator 4	Private expenditure on pharmaceuticals (per capita at average exchange rate) in US\$	2	2000	6	2000	4	2000	WHO. 2004. The World Medicines Situation.
Health Information System (HIS) Module								
Indicator 1	Maternal mortality ratio reported by national authorities ⁹	1,100	2001	560	2001	518	2001	UNICEF. 2006. The State of the World's Children 2006.
Indicator 2	Mortality rate, under-5 (per 1,000)	203	2004	151	2004	131	2004	The World Bank. 2006. World Development Indicators.
Indicator 3	HIV prevalence among pregnant women aged 15-24	12	2002	12	-	10	-	UNICEF. 2006. The State of the World's Children 2006.
Indicator 4	Proportion of children under 5 years who are underweight for age	24	2000	25	-	29	-	WHO. 2006. The World Health Report.
Indicator 5	Number of hospital beds (per 10,000 population)	NA	2004	6	-	26	-	WHO. 2006. The World Health Report.
Indicator 6	Contraceptive prevalence (% of women ages 15-49)	13.20	2000	23.36	-	26.25	-	The World Bank. 2006. World Development Indicators.
Indicator 7	Percentage of surveillance reports received at the national level from districts compared to number of reports expected	100.00	2005	91.90	2005	92.35	2005	WHO. 2005. Annual WHO/UNICEF Joint Reporting Form.

NOTES:

NC: Not Calculated because the regional comparator includes both high income countries as well as some countries that have a population of less than 30,000, which are not classified by the World Bank.

NA: Data Not Available

- : No specific year is noted here since the average is calculated across different countries, where the data is reported in different years

1- The geographic classifications used by the World Bank are for low-income and middle-income economies only. Low-income and middle-income economies are sometimes referred to as developing economies. The use of the term is convenient; it is not intended to imply that all economies in the group are experiencing similar development or that other economies have reached a preferred or final stage of development. The countries are divided into 6 regions: East Asia and Pacific (EAP), Europe and Central Asia (ECA), Latin America and the Caribbean (LAC), Middle East and North Africa (MENA), South Asia (SA), Sub-Saharan Africa (SSA). Countries noted with * in the spreadsheets indicate high-income countries (with the exception of South Africa classified as an Upper-middle income country) which are not part of the World Bank geographic classification.

2- The classification of countries by income group is based on the World Bank classification which classifies member economies, and all other economies with populations of more than 30,000. The countries which are not in a category have a population of less than 30,000.

3- Economies are divided according to 2004 GNI per capita, calculated using the World Bank Atlas method. The groups are: LI (low income), \$825 or less; LMI (lower middle income), \$826 - \$3,255; UMI (upper middle income), \$3,256 - \$10,065; and (HI) high income, \$10,066 or more (the HI countries are further divided between OECD and non-OECD, noted n-OECD).

4- The following countries report "<0.1": Azerbaijan, Bosnia and Herzegovina, Brunei Darussalam, Bulgaria, Croatia, Egypt, Iraq, Japan, Jordan, Mongolia, Philippines, Republic of Korea, Romania, Slovakia, Slovenia, Sri Lanka, Syrian Arab Republic, Tajikistan, The former Yugoslav Republic of Macedonia, Tunisia, Turkmenistan

5- Estimates derived by regression and similar estimation methods for the following countries: Afghanistan, Albania, Algeria, Angola, Armenia, Bhutan, Bolivia, Botswana, Burundi, Cape Verde, Comoros, Congo, Cote d'Ivoire, Democratic Republic of Korea, Democratic Republic of Congo, Djibouti, Dominican Republic, El Salvador, Equatorial Guinea, Fiji, Gambia, Georgia, Ghana, Guinea Bissau, Indonesia, Iraq, Kazakhstan, Kyrgyzstan, Lau People's Democratic Republic, Lebanon, Lesotho, Liberia, Libyan Arab Jamahiriya, Maldives, Mozambique, Myanmar, Namibia, Nicaragua, Niger, Nigeria, Oman, Pakistan, Papua New Guinea, Senegal, Sierra Leone, Solomon Islands, Somalia, South Africa, Sudan, Swaziland, Syrian Arab Republic, Tajikistan, Timor-Leste, Turkey, Turkmenistan, United Arab Emirates, Uzbekistan, Viet Nam.

6- Ranges from -2.5 to 2.5. Higher values indicate better governance ratings.

7- Percentile rank indicates the percentage of countries worldwide that rate below the selected country (subject to margin of error)

8- Democratic People's Republic of Korea reports "<1000" for the per capita total expenditure on health at average exchange rate (US\$)

9- Data refer to the most recent year available during the period 1990-2004. Several countries either have data that refer to years or periods other than 1990-2004, differ from the standard definition, or refer to only part of a country. These countries are Dominican Republic, Ghana, Lebanon, Papua New Guinea, Solomon Islands, Syrian Arab Republic, Turkey.

REFERENCES

- ¹ World Bank. 2007. Rwanda Country Brief. <http://go.worldbank.org/YP79K5BDT0>.
- ² United Nations Conference on Trade and Development. 2004. Rwanda Brief. http://www.unctad.org/sections/ldc_dir/docs//ldc-rwa.pdf.
- ³ President's Emergency Plan for AIDS Relief. 2007. 2007 Country Profile: Rwanda. <http://www.pepfar.gov/pepfar/press/81639.htm>.
- ⁴ President's Malaria Initiative. 2007. Rwanda Country Profile. http://www.fightingmalaria.gov/countries/rwanda_profile.pdf.
- ⁵ Ministry of Health, Rwanda. 2007. Documents and Reports. <http://www.moh.gov.rw/publication.html>.
- ⁶ Ministry of Health, Rwanda, in collaboration with the National Population Office, Rwanda, and ORC Macro, USA. 2001. Rwanda Service Provision Assessment Survey. <http://www.measuredhs.com/pubs/pdf/SPA3/02Chapter2.pdf>.
- ⁷ Soeters, Robert et al. 2006. Performance-based financing and changing the district health system: experience from Rwanda. *Bulletin of the World Health Organization*. 84: 884-889. <http://www.who.int/bulletin/volumes/84/11/06-029991.pdf>.
- ⁸ Messen, B et al. 2007. Output-based payment to boost staff productivity in public health centers: contracting in Kabutare district, Rwanda. *Bulletin of the World Health Organization*. 85: 108-115.
- ⁹ <http://www.mfdr.org/Sourcebook/2ndEdition/4-3RwandaPBF.pdf>
- ¹⁰ <http://www.mfdr.org/Sourcebook/2ndEdition/4-3RwandaPBF.pdf>
- ¹¹ World Health Organization. 2006. World Health Report. Statistical Annex. http://www.who.int/whr/2006/annex/06_annex2_en.pdf.
- ¹² Ministry of Health, Rwanda. 2003. Rwanda National Health Accounts 2003. http://www.who.int/nha/country/Rwanda_NHA_Report_2003.pdf.
- ¹³ World Health Organization. 2006. Op cit.
- ¹⁴ Ministry of Health, Rwanda. 2003. Op cit.
- ¹⁵ World Bank Group. 2004. Worldwide Governance Indicators. <http://go.worldbank.org/493Q33OQ90>
- ¹⁶ Ibid.
- ¹⁷ Ministry of Health, Rwanda, National Population Office, Rwanda, ORC Macro. 2001. Op cit.
- ¹⁸ Ibid.
- ¹⁹ Health Metrics Network. 2007. Request for Proposals for strengthening national health information system (HIS) policies. http://www.who.int/healthmetrics/employment/%20RFP_policies_13june2007_final.pdf
- ²⁰ The Capacity Project. 2007. Rwanda Country Brief. http://www.capacityproject.org/images/stories/files/countrybrief_7.pdf

Health Systems 20/20

Health Systems 20/20, a five-year (2006-2011) cooperative agreement funded by the U.S. Agency for International Development (USAID), offers USAID-supported countries help in solving problems in health governance, finance, operations, and capacity building. By working on these dimensions of strengthening health systems, the project will help people in developing countries gain access to and use priority population, health, and nutrition (PHN) services. Health Systems 20/20 integrates health financing with governance and operations initiatives. This integrated approach focuses on building capacity for long-term sustainability of system strengthening efforts. The project acts through global leadership, technical assistance, brokering and grant making, research, professional networking, and information dissemination.

Why Health Systems?

The delivery of all health services, including the priority PHN services, depends on the underlying health system. To combat malaria, TB, HIV, and maternal and child health problems, the health system needs adequate and appropriately allocated financing, inclusive decision making and accountability, and financial and human resource management systems that deliver inputs where and when needed. A smoothly functioning health system maximizes the delivery of effective and life-saving technical interventions.

How to Access Health Systems 20/20

USAID missions and bureaus can access Health Systems 20/20 by obligating funds to cooperative agreement No. GHS-A-00-06-00010-00. The project can accept all types of USAID funding, including PEPFAR, POP, CS, EFS, as well as funds through EGAT and D&G. As a Leader with Associate mechanism, missions and bureaus can also negotiate and manage separate Associate Awards for which they will designate a CTO.

Health Systems 20/20 is funded by the U.S. Agency for International Development, cooperative agreement GHS-A-00-06-00010-00.

Abt Associates Inc. leads a team of partners that includes:
| Aga Khan Foundation | BearingPoint | Bitrán y Asociados
| BRAC University | Broad Branch Associates | Forum One
Communications | RTI International | Training Resources Group
| Tulane University School of Public Health

For more information about Health Systems 20/20 publications (available for download) please contact:

Health Systems 20/20
Abt Associates Inc.
4800 Montgomery Lane, Suite 600 | Bethesda, MD 20814 USA
E-mail: info@healthsystems2020.org | www.healthsystems2020.org