

COUNTRY PROFILE: ETHIOPIA

Overview of Ethiopia's health system

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**SOCIAL
INNOVATION
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INITIATIVE**

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LIST OF ABBREVIATIONS

AIDS	Acquired immune deficiency syndrome
EPRDF	Ethiopian People's Revolutionary Democratic Front
FDRE	Federal Democratic Republic of Ethiopia
FMOH	Federal Ministry of Health
GTP	Growth and Transformation Plan
HDI	Human development index
HIV	Human immunodeficiency virus
HSDP	Health Sector Development Programme
MDG	Millennium Development Goal
OOP	Out-of-pocket
PHC	Primary health care
US\$	United States dollar
WHO	World Health Organization

EXECUTIVE SUMMARY

Ethiopia is one of the world's oldest civilisations and is located in the Horn of Africa, bordered by Eritrea, Djibouti, Somalia, Sudan, South Sudan, and Kenya. The ethnically diverse population of nearly 100 million is the second largest in Africa. Over 100 languages are spoken in Ethiopia and these languages are broadly grouped into Semitic, Cushitic, Omotic, and Nilotic languages. Just over 80% of Ethiopia's population live in rural areas and most Ethiopians practise Christianity. Notably, the Ethiopian Orthodox church has played a dominant role in the country's culture and politics. Ethiopia is a republic with the capital at Addis Ababa. Although Ethiopia is one of the world's poorest countries, the economy has experienced broad based growth of 10.8% on average in the last decade. Encouraging progress has been made in Millennium Development Goals (MDGs) in primary education, HIV/AIDS, and malaria, with MDGs in child mortality and water achieved. Addressing poverty remains a major challenge and a high share of the national budget is already devoted to pro-poor programs. Ethiopia has high rates of maternal and child mortality, HIV/AIDS, and tuberculosis, with an increasing burden of non-communicable diseases. The cost of healthcare represents another challenge as out-of-pocket payments comprise 90% of private health expenditure. The government has implemented a health extension program, but gaps remain in healthcare delivery capacity. Despite Ethiopia's limited economic infrastructure, a number of technological and programmatic innovations have been implemented, particularly in the agricultural and healthcare sectors.

1. COUNTRY AT A GLANCE

Component	Details/indicator/year	Data
Population	Total population (2014)	96 958 732 ^a
	Percentage of urban vs. rural (2014)	Urban: 19, rural: 81 ^a
Geography	Ethiopia has a complex terrain with five distinctive topographic features: the Western Highlands, the Western Lowlands, the Eastern Highlands, the Eastern Lowlands, and the Rift Valley. The climate ranges from tropical to temperate, depending on the elevation, and is characterised by three seasons: a long dry season from September to February, a short rainy season in March and April, and a long rainy season from June to August. ^b	
Ethnic composition	Ethiopia is ethnically diverse, and approximately 100 languages are spoken which are broadly categorised into Semitic, Cushitic, Omotic, and Nilotic language groups. ^b	
Government	Ethiopia's government is a republic with the capital at Addis Ababa. The prime minister serves as the head of government and the president serves as head of state, though the latter's role is largely ceremonial. The legislature is comprised of a House of Peoples' Representatives and a House of the Federation, with members of both houses serving five-year terms. The ruling party in the House of Peoples' Representatives nominates the president and designates the prime minister. The highest court is the Supreme Court; each state also has its own court system. ^b	
Economic and infrastructure data	GDP per capita (purchasing power parity) (2014)	US\$ 1 499.8 (current international dollars) ^a
	Economic growth as percentage of GDP (2014)	10.3 ^a
	Gini-index (2013)	33.6 ^c
	HDI (2014)	0.442 (ranked 174) ^d
	Percentage of people below national poverty line (2010)	29.6 ^a
	Percentage of unemployment (2014)	5.2 ^a
	Percentage of adult literacy (2007)	39 ^a
	Education gender parity index (2006)	0.81 ^a
	Percentage of population with access to sanitation (2015)	Access to improved drinking water: 57 (urban: 93, rural: 49) ^a Access to improved sanitation facilities: 28 (urban: 27, rural: 28) ^a
	Percentage of population with access to electricity (2012)	26.6 ^a

Health system	Health expenditure as percentage of GDP (2014)	4.9 ^a
	Annual public expenditure on health as percentage of total health expenditure (2014)	58.7 ^a
	Health expenditure per person (2014)	US\$ 27 (current US\$) ^a
	Number of physicians per 1 000 population (2010)	0.022 ^a
	Number of nurses and midwives per 1 000 population (2010)	0.2 ^a
	Percentage of births with skilled attendants (2014)	16 ^a
	Average life expectancy in years (2014)	64 ^a
Disease burden	HIV prevalence as percentage among adults aged 15–49 (2014)	1.2 ^e
	Deaths due to AIDS (2014)	730 000 ^e
	Deaths due to non-communicable diseases (2012)	210 500 ^f
	Deaths due to homicide (2012)	7 334 ^f
	Maternal mortality rate per 100 000 births (2015)	353 ^a
	Infant mortality rate per 1 000 births (2015)	41 ^a
	Under-five mortality rate per 1 000 births (2015)	59 ^a
Top five causes of mortality as percentage of deaths (2012)^g	1. Lower respiratory infections	15.0
	2. HIV/AIDS	7.3
	3. Diarrhoeal diseases	6.0
	4. Birth asphyxia and birth trauma	4.3
	5. Protein-energy malnutrition	4.1
Top five causes of DALYs (2012)^g	1. Maternal/neonatal/nutritional	ND
	2. Other infectious diseases	ND
	3. Acute respiratory infections	ND
	4. HIV/TB/malaria	ND
	5. Other non-communicable diseases	ND

GDP: gross domestic product; gini-index: measures the extent to which the distribution of income (or consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution; HDI: human development index; DALYs: disability-adjusted life years.

Sources: ^a World Bank (2015); ^b Marcus, Crummey, and Mehretu (2015); ^c UNDP (2013); ^d UNDP (2015); ^e Joint United Nations Programme on HIV and AIDS (2014); ^f WHO (2012); ^g WHO (2015a).

2. COUNTRY CONTEXT

2.1 COUNTRY HISTORY AND POLITICAL SYSTEM

Ethiopia is one of the world's oldest civilisations. In the 2nd century AD, the area of present-day Eritrea and Northern Ethiopia was a regional trading centre and Coptic Christianity was introduced from Egypt in the 4th century. In the mid-16th century, Muslim leader Ahmad Gran conquered much of Ethiopia and a series of emperors were in power from the mid-19th century. Emperor Menelik II signed a bilateral friendship treaty with Italy in 1889. Italy invaded Ethiopia in 1895 but was defeated at Adwa in 1896 with Italy retaining control over Eritrea (BBC, 2016).

In 1913, Menelik was succeeded by his grandson Lij Iyasu, who was in turn succeeded by Menelik's daughter, Zawditu, who ruled through Ras Tafari Makonnen. Zawditu died in 1930 and was succeeded by Ras Tafari Makonnen, who became Emperor Haile Selassie I. Italy invaded Ethiopia again in 1935 and captured Addis Ababa. Haile Selassie fled and the king of Italy was made emperor of Ethiopia. The Ethiopian resistance, greatly aided by British and Commonwealth troops, defeated the Italians in 1941 and restored Haile Selassie to the throne (BBC, 2016).

In 1962, Haile Selassie annexed Eritrea, which became an Ethiopian province. The first conference of the Organisation of African Unity was held in Addis Ababa in 1963. Haile Selassie was overthrown in a military coup in 1974, with General Teferi Benti becoming head of state. Haile Selassie died in mysterious circumstances while in custody one year later. In 1977, Benti was killed and replaced by Colonel Mengistu Haile Mariam. In the same year, Somalia invaded Ethiopia's Ogaden region, but Somali forces were defeated with help from the Soviet Union and Cuba in 1978 (BBC, 2016).

Between 1984 and 1985, Western food aid was sent to Ethiopia and thousands forcibly resettled from Eritrea and Tigre during the worst famine in a decade. Two years later, Mengistu was elected president under a new constitution. In 1988, Ethiopia and Somalia signed a peace treaty. The Ethiopian People's Revolutionary Democratic Front (EPRDF) captured Addis Ababa in 1991, forcing Mengistu to flee the country and Eritrea established its own provisional government, becoming independent in 1993. The following year, 1994, a new constitution divided Ethiopia into ethnically based regions and Negasso Gidada assumed the presidency in 1995 with Meles Zenawi serving as prime minister. Ethiopian-Eritrean border clashes turned into a full-scale war in 1999 that was followed by a ceasefire agreement signed in 2000 (BBC, 2016).

In 2002, Ethiopia and Eritrea accepted a new common border drawn up by an independent commission, although disputes continue over the town of Badme. A resettlement programme started in March 2004 to move more than two million people away from parched, over-worked highlands. A year later, violent protests followed multi-party elections and a partial election was rerun a few months later, with the ruling party gaining enough seats to form a government. Ethiopian troops entered Somalia at the end of 2006 and engaged in fighting with Islamists controlling large parts of the country and capital (BBC, 2016).

In 2009, Chinese firms secured a deal to build several hydro-power dams and wind farms. The ruling EPRDF won a majority in parliamentary elections in 2010, although opposition leaders demanded a rerun. Millions of Ethiopians and Somalian refugees required emergency aid after a drought started in July 2011. In 2012, Prime Minister Meles Zenawi died resulting in the Deputy Prime Minister and Foreign

Minister Hailemariam Desalegn taking over. The ruling EPRDF won an overwhelming victory in the general election in May 2015 (BBC, 2016).

2.2 POPULATION

Ethiopia is the second-most populous country in Sub-Saharan Africa with a population of 96.5 million and a population growth rate of 2.5%, as reported in 2014; additionally, four-fifths of the population live in rural areas (World Bank, 2015). Ethiopians are ethnically diverse, having four main linguistic groups—namely the Semitic, Cushitic, Omotic, and Nilotic groups—representing over 100 languages. All Ethiopian languages are officially recognised under the constitution and ethno-linguistic differences were used as the basis for restructuring Ethiopia’s administrative divisions in the 1990s. Amharic is the “working language” of the federal government, and together with Oromo, it is one of the two most widely spoken languages in the country. The Ethiopian Orthodox Church is one of the oldest organised Christian bodies in the world. It played a dominant role in the culture and politics of Ethiopia as the official religion of the ruling elite until the demise of the monarchy in 1974. More than two-fifths of Ethiopians follow the teachings of the Ethiopian Orthodox Church, with an additional one-fifth adhering to other Christian faiths. Islam, introduced in the 7th century, is practised by about one-third of Ethiopians and a small fraction of Ethiopians are animist and worship a variety of African deities. A small minority practises Judaism. Most Ethiopian Jews, known as Beta Israel and Falasha, relocated to Israel (Marcus, Crummey, and Mehretu, 2015). Life expectancy in Ethiopia is 64 years (World Bank, 2015), and the population is quite young having a median age just under 18 years (United Nations, 2015).

2.3 ECONOMY

Table 1. Economic measures of Ethiopia

Indicator/year	Data
GDP per capita (purchasing power parity) (2014)	US\$ 1 499.8 (current international dollars) ^a
Economic growth as percentage of GDP (2014)	10.3 ^a
Debt as percentage of GDP (2015)	48.6 ^b
Gini-index (2013)	33.6 ^c
HDI (2014)	0.442 (ranked 174) ^d
Percentage of people below national poverty line (2010)	29.6 ^a
Percentage of unemployment (2014)	5.2 ^a

GDP: gross domestic product; gini-index: measures the extent to which the distribution of income (or consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution; HDI: human development index.

Sources: ^a World Bank (2015); ^b IMF (2015); ^c UNDP (2013); ^d UNDP (2015).

Ethiopia is one of the world’s poorest countries, with a per capita income of US\$ 550, substantially lower than the regional average (Gross National Income, Atlas Method). Strong and broad-based economic growth has occurred over the past decade, averaging 10.8% per year in 2003/04 to 2013/14, compared to the regional average of 4.8%. The service and agricultural sectors account for most of

this growth, with the manufacturing sector performing modestly. Economic growth has reduced poverty in both urban and rural areas, as 38.7% of Ethiopians lived in extreme poverty in 2004/05; with this figure at 29.6% five years later, representing a decrease of 9.1 percentage points as measured by the national poverty line of less than US\$ 0.6 per day. Ethiopia has achieved the MDGs for child mortality and water, with encouraging progress in gender parity in primary education, HIV/AIDS, malaria, and universal primary education. Major challenges still waiting to be addressed are the causes of poverty in the Ethiopian population even with a high share of the budget already devoted to pro-poor programs. Although donor support may be vital to meet these challenges, the effective use of donors is a significant challenge requiring improved governance, empowered local authorities, and greater accountability towards citizens (World Bank, 2016).

2.4 ENVIRONMENT

Ethiopia is bordered by Eritrea to the north, Djibouti to the northeast, Somalia to the east, Kenya to the south, and South Sudan and Sudan to the west. Ethiopia's topography is built on four geologic formations. Ethiopia's complex relief is difficult to classify, but five topographic features can be discerned, namely the Western Highlands, the Western Lowlands, the Eastern Highlands, the Eastern Lowlands, and the Rift Valley. The upper Rift Valley is one of the most productive and most settled parts of Ethiopia. Because Ethiopia is in the tropical latitudes, areas of lower elevation have climatic conditions typical of tropical savannah or desert, with higher elevations experiencing temperate weather. Average annual temperatures in the highlands are in the mid-10 °C, while the lowlands average in the upper 20s °C. September to February marks the long dry season known as the *bega* and this is followed in March and April by a short rainy season called the *belg*. May is a hot and dry month preceding the long rainy season *kremt* in June, July, and August. The coldest temperatures generally occur in December or January (*bega*) and the hottest in March, April, or May (*belg*). Total annual precipitation varies from 500 to 1 000 mm, with the driest of all regions, the Denakil Plain, receiving less than 500 mm or none at all (Marcus, Crummey, and Mehretu, 2015).

3. HEALTH SYSTEM

3.1 OVERVIEW

Ethiopia's socio-economic situation compounds the challenges within the health sector, with high rates of maternal and child mortality, high prevalence rates of preventable, communicable diseases such as HIV/AIDS and tuberculosis, and a rising burden of non-communicable diseases. Out-of-pocket (OOP) payments comprise about 90% of private health expenditure and 37% of total health expenditure and pose a significant financial burden for patients. Social health insurance policy options are in development as an attempt to increase sustainable health financing. Although Ethiopia has achieved MDG 4 and implemented a health extension programme, gaps remain in its capacity to fully meet the needs of the health sector (Government of Ethiopia, 2010; WHO, 2014; WHO, 2013; World Bank, 2015).

3.2 ORGANIZATION

Ethiopia's health sector has been organised into a three-tier health care delivery system (Government of Ethiopia, 2010):

1. **Level one** is a Woreda (District) system comprised of a primary hospital that covers 60 000 to 100 000, health centres that each cover 15 000 to 25 000, and satellite health posts that each cover 3 000 to 5 000. A referral system connects these facilities. A Primary Health Care Unit consists of five satellite health posts and one health centre. Each health post typically employs two health extension workers who are intended to spend the majority of their time on community outreach programme visits to households. A health centre has an average of 20 staff and inpatient capacity of five beds. A primary hospital has a staff of 53 persons on average and typical inpatient capacity of 25 to 50 beds.
2. **Level two** is comprised of a general hospital that covers 1 to 1.5 million and serves as a referral centre for primary hospitals. The average number of staff is 234.
3. **Level three** is comprised of a specialised hospital covering 3.5 to 5 million. Specialised hospitals have on average 440 staff.

While the Federal Ministry of Health oversees the health sector at the national level, decision-making has been devolved to regional governments. Thus, offices from the Federal Ministry of Health, Regional Health Bureaus, and Woreda Health Offices share in decision-making and responsibilities for the health sector. The Ministry and Regional Health Bureaus focus on policy and technical support, while Woreda Health Offices manage and coordinate their respective district health systems (Government of Ethiopia, 2010). The private and non-governmental sectors have also expanded, accounting for 11% of health service coverage and giving rise to prospective public-private partnerships (WHO, 2013).

3.3 CAPACITY

Table 2. Number of facilities and health workers per population, Ethiopia

Indicator/year	Data
Number of health posts (2010)	14 416 ^a
Number of health centres (2010)	2 689 ^a
Number of hospitals (2010)	195 ^a
Number of beds per 1 000 population (2011)	6.3 ^b
Physicians per 1 000 population (2010)	0.02 ^b
Nurses and midwives per 1 000 population (2010)	0.2 ^b
Community health workers per 1 000 population (2009)	0.4 ^b

Sources: ^a Government of Ethiopia (2010); ^b World Bank (2015).

Owing to the construction of additional facilities and refurbishment of existing ones, potential health service coverage was increased from 45% in 1996/97 to 64% in 2003/04, and most recently is reported to cover 86% of Ethiopia, including most rural areas (WHO, 2013). The intended target under the Health Sector Development Programme III was to equip 16 253 health posts. Thus far, 14 416 have been constructed and 12 292 of those have been equipped. 3 200 health centres in total are targeted for construction and 2 299 of the 2 689 constructed have been equipped. 111 public hospitals and 20 blood banks have been completed in addition to a National Laboratory Master Plan (Government of Ethiopia, 2010).

However, utilisation of health services was last reported at 0.32 per capita, indicating low availability, demand, and quality of services. The health sector remains short on human resources, funding, and capacity for implementation and monitoring and evaluation (WHO, 2014). The Federal Ministry of Health has focused on scaling up community and mid-level health professionals and trained 31 831 health extension workers as of 2010 to meet the needs of the community level health extension package. The government also launched an Accelerated Health Officer Training Programme in 2005 to address clinical service and public health sector management needs at the district level, with 3 573 health officers graduated and deployed as of 2010. The government has also opened the new Millennium Medical School in St. Paul's Hospital to increase training capacity. Still, the health sector remains short on physicians, midwives, and anaesthesia professionals, a situation to which the private sector has provided limited contribution. Human resources are also unevenly distributed, particularly in rural agrarian regions (Government of Ethiopia, 2010).

3.4 POLICY ENVIRONMENT

The World Health Organization (WHO) (2014) states:

The right to health for every Ethiopian has been guaranteed by the 1995 Constitution of the Federal Democratic Republic of Ethiopia (FDRE), which stipulates the obligation of the state to issue policy and allocate ever-increasing resources to provide public health services to all Ethiopians. The Federal Ministry of Health (FMOH) of Ethiopia has prepared a comprehensive strategic plan, the Health Sector Development Programme (HSDP), in alignment with the national Growth and Transformation Plan (GTP). The national health sector development plan of 20 years has been divided in four series of five consecutive years to ensure the attainment of national goals and MDG targets. The current HSDP IV covers a five-year period from July 2010 to June 2015. The governance mechanisms of HSDP IV include: Joint Consultative Forum, Joint Core Coordinating Committee, joint review meetings, and an annual review meeting. These and other strategies and approaches are directed towards improving the standards of living, particularly the health of the population throughout the country by influencing the performance of health determinants like education, poverty reduction, and access to good sanitation and safe water. Ethiopia follows a decentralized health care system, and preventive, promotive and curative health care is delivered by public, private for profit and not-for profit players in the health sector. Primary health care (PHC) covers 90%, reaching most of the rural areas in the country. The growing countrywide network of healthcare facilities has enhanced access to health services, and the rapid expansion of both private-for-profit and not for-profit health facilities has enhanced public-private-partnerships in health, and accounts for about 11% of health service coverage.

WHO (2014) lists the following as strategic priorities for Ethiopia:

1. Support the strengthening of health systems and services in line with the primary health care approach.
2. Contribute to the reduction of burden of communicable, non-communicable diseases and conditions/injuries.

3. Contribute to the reduction of maternal, new-born and child mortality and improved sexual and Reproductive Health.
4. Support the strengthening of partnership, coordination and resource mobilization.

3.5 HEALTH FINANCING

Table 3. Health financing data for Ethiopia, 2014

Indicator	Data
Total health expenditure (current US\$)	US\$ 2 583 734 000
Public expenditure on health as percentage of total expenditure	58.7
Public expenditure on health as percentage of general government expenditure	15.7
OOP expenditure on health as percentage of total private expenditure	78.1
Private insurance expenditure on health as percentage of total private expenditure	1.1
Expenditure of non-profit institutions serving households as percentage of total private expenditure	19.1
External funding (current US\$)	US\$ 1 077 284 000
Health expenditure as percentage of GDP	4.9

OOP: out of pocket; GDP: gross domestic product.
Source: WHO (2015b).

One of the greatest obstacles to healthcare access is high OOP spending, which accounts for approximately 37% of total expenditures in the health sector. The public health sector is generally funded by the allocation of revenue collected via general taxes and external donor funds. Ethiopia recently designed social health insurance policy options, including mandatory social insurance and voluntary community-based health insurance systems, to increase sustainable health financing (WHO, 2013).

The government has attempted to pool funding through the MDG Performance Fund. However, Ethiopia remains dependent on donor funding and donor pledges historically tend to be earmarked for certain projects rather than pooled for health system strengthening. As of 2010, financing gaps remain for the health system and for maternal and child health in particular. Ethiopia aims to implement a “one budget” approach at all levels of the health system to ensure a unified plan and reduce the costs of dealing with multiple finance streams. To do so, the government plans to: align project support with sector priorities, keep local governments informed of project activities and funds allocated, ensure regular negotiation and discussion between local governments, and implement joint monitoring and evaluation of project implementation by local government and other stakeholders (Government of Ethiopia, 2010).

3.6 COUNTRY DISEASE PROFILE

Table 4. Disease profile for Ethiopia

Indicator/year	Data
Age-standardized DALYs per 100 000 for communicable diseases (2012)	28 224 ^a
Age-standardized DALYs per 100 000 for non-communicable diseases (2012)	21 724 ^a
Age-standardized DALYs per 100 000 for injuries (2012)	5017 ^a
Under-five mortality rate per 1 000 live births (2015)	59 ^b
Infant mortality rate per 1 000 live births (2015)	41 ^b
Maternal mortality rate per 100 000 live births (2015)	353 ^b
Estimated cases of malaria (2013)	3 800 000 ^a
Estimated deaths due to malaria (2013)	6 700 ^a
Prevalence of TB per 100 000 (2014)	200 ^a
Incidence of TB per 100 000 (2014)	207 ^a
Deaths due to TB among HIV-negative people per 100 000 (2013)	33 ^a
Prevalence of HIV as percentage among adults aged 15–49 (2014)	1.2% ^c
Deaths due to AIDS (2014)	23 000 ^c
Deaths due to non-communicable diseases (2012)	210 500 ^a
Deaths due to homicide (2012)	7 334 ^a
Percentage of top five causes of mortality (2012) ^d	
1. Lower respiratory infections	15.0
2. HIV/AIDS	7.3
3. Diarrhoeal diseases	6.0
4. Birth asphyxia and birth trauma	4.3
5. Protein-energy malnutrition	4.1
Top five causes of DALYs (2012) ^d	
1. Maternal/neonatal/nutritional	ND
2. Other infectious diseases	ND
3. Acute respiratory infections	ND
4. HIV/TB/malaria	ND
5. Other non-communicable diseases	ND

DALYs: disability-adjusted life years; TB: tuberculosis; ND: not determined.

Sources: ^a WHO (2015c); ^b World Bank (2015); ^c Joint United Nations Programme on HIV and AIDS (2014); ^d WHO (2015a).

Eighty percent of diseases in Ethiopia are due to infectious diseases, malnutrition, and personal and environmental hygiene. Environmental risk factors such as lack of comprehensive water and sanitation coverage and indoor air pollution are estimated to contribute to 31% of the total disease burden. Maternal and child health are health sector priorities but, although Ethiopia has achieved MDG 4 and reduced under-five mortality by two-thirds, neonatal mortality remains high. Great efforts have been

made to improve maternal health and reduce maternal mortality. Violence against women also remains a pressing issue (WHO, 2014).

Communicable diseases such as HIV/AIDS, tuberculosis, and malaria represent a significant component of Ethiopia's burden of disease, in addition to the increasing prevalence of non-communicable diseases such as cardiovascular diseases, diabetes mellitus, and cancer, as well as injuries. Non-communicable diseases are estimated to account for 34% of all deaths in Ethiopia and their contribution to DALYs is comparable to that of communicable diseases. Cross-border tensions and natural disasters such as floods and droughts pose additional challenges to population health, particularly for vulnerable groups (WHO, 2013).

4. INNOVATION ECO-SYSTEM

Although its limited economic infrastructure has impeded in-country innovation, Ethiopia has implemented several technological and programmatic innovations. Bill Gates cites, for instance, a near-infrared spectroscopy tool recently developed for use by farmers to assess soil conditions, circumventing the need for laboratory tests. Gates also describes private investment in the agricultural sector and the implementation of health extension workers in the health sector to deliver basic health education, prevention, and treatment, providing a foundation for a robust health system (Gates, 2012). The United States Agency for International Development has also cited the health extension programme as “an innovative intervention marked by institutionalization of primary health care, government leadership, and the alignment and substantial support of development partners” (Bejal, 2012).

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