

# **The Population, Health and Environment Nexus**

The need for integration and networking

A Background paper for the establishment and launching of PHE in Ethiopia in May 2008

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## **1. Introduction**

The Earth's ecosystems and its human population are inherently connected. The fundamental relationships are fairly easy to grasp. Ecosystem goods and services provide the conditions for a healthy and secure life. Ecosystems provide energy and raw materials for human activities, which in turn affect the ecosystems and the relationships between the interacting bodies. These relationships are intricately interwoven. Worldwide data indicate that nearly two-thirds of the services provided by nature to humankind are found to be in decline. These interactions encompass human population growth, consumption, resource use and depletion, as well as disturbance of the natural world in a holistic manner. Issues about environment are entangled with those of population and damages to environmental goods and services can adversely affect people's health and well-being. However, major differences in perceptions, assumptions, and definitions among stakeholders complicate the holistic nature of the interactions and offset the underlying relationships. It is, therefore, prudent to acknowledge that the livelihood of people and their well-being are inseparably linked to their environment and are not defined according to different sectors.

A forward-looking analysis of the interconnected components of an ecosystem suggests that the transition to sustainability will depend upon fundamental changes in the way people perceive the complex systems upon which they rely. There are, however, challenges which are at the interface of science, policy and governance which need the interaction of society, relevant stakeholders and policy-makers to promote a paradigm shift that recognizes the interconnectedness of society to natural capital assets. The most critical challenge is the over-riding goal of increasing productive capacity which may conflict with increasing adaptive capacity. This eminent conflict will phase out when we move from the view of humanity as independent of nature to the view of humanity as an integral part of nature co-evolving in a dynamic fashion within the biosphere. We must, therefore, build knowledge, incentives, and learning capabilities into institutions and organizations through advocacy, research, training and communication to manage the adaptive capacity of local, regional and global ecosystems and to improve livelihoods of

communities. Such management should involve diverse interest groups in new and imaginative roles. The dreams of all citizens can be realized only if we acknowledge the reality of complex relationships and provide pertinent alternatives which are mutually beneficial. In effect, we must create a win-win interaction between nature and a responsive consumer approach.

Ethiopia is home to two of the world's biodiversity hotspots, each of which comprises at least 1,500 species living in rapidly shrinking habitats. Integrated conservation efforts appear to be the last resort to save the remaining mix of landscape and ecosystem diversity. Land is needed to grow food, yet agricultural yields have dropped and traditional farming practices are proving unsustainable. With more than 77 million citizens and growing by an estimated 2 million annually a better balance must be struck between human survival and preserving natural resources.

Interventions which are all within reach are necessary to bring a lasting solution to unshackle all Ethiopians from the predicament imposed by both nature and humankind. These interventions logically lead to the need for integration of Population, Health and Environment (PHE) and the networking which will serve as the driving force for its sustainability.

## **2. Objective**

The objective of this article is to establish the specific properties of the integration of interventions in PHE services, the need for their integration and the need for networking both locally and globally. It will assess the state of PHE in Ethiopia, the policies and strategies relevant for PHE, and the opportunities that are at the nexus of integrating program implementation.

## **3. The need for PHE integration**

Long-term or short-term interventions that separately foster beneficial effects on population, health and environment can be counterproductive and self-defeating. The

synergies that can be obtained through integrated programs will be sacrificed in exchange for high cost at best. In most developing countries, environmental/natural resource organizations are charged with managing a resource that results in limiting the communities' access to those resources—protection by exclusion—through setting aside a protected area, whether a forest, a grazing area or a lake, and cutting off communities from their traditional practices. It then becomes difficult for the communities to establish positive relationships with the environmental resource managers. But if resource managers could join efforts with health organizations, they could provide some tangible benefits through agreed entry points and gain the trust of the communities. This is particularly possible when working together with projects that provide immediate assistance, such as food, immunizations, reproductive health services, and provision of clean water or the building of schools. Communities may also be more inclined to participate in the conservation project and become more receptive to the practices if they feel they are receiving something in return. This leads to the recognition that people may not exercise adequate stewardship over their natural resources unless their basic needs for health, nutrition and economic well-being are adequately addressed. Project implementers will add value and build synergies by integrating with other complementing projects.

The key objective of addressing the complex connections between humans, their health, and their environment is, therefore, to simultaneously improve access to health services while also helping communities manage and conserve natural resources and critical ecosystems in ways that do not compromise their health and livelihoods. This means that achieving desired family size must come with encouraging impacts on the well-being of families and better management of natural resources for the present generation and posterity. Integrated PHE programs promote equity, health and environmental stewardship.

At the planning level, the integration of PHE may require the participation of various experts such as ecologists, health specialists, and community development experts who could link the livelihoods of communities to environmental stress, fertility, migration, women's health, women's educational status, and poverty alleviation. Well-planned

integration will have cascading pay-offs and will draw bystanders toward the local and global efforts to reach targets beyond the MDGs.

At the global level, the concerns over population, environment and health have been evolving over time but were expressed comprehensively in the Rio Declaration on Population, Environment and Development (United Nations, 1992). The Rio Declaration identified population policies as an integral element of sustainable development. Principle 8 of the Rio Declaration stated that “to achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies.” The declaration also covered demographic dynamics and sustainability and stated that “the growth of world population and production combined with unsustainable consumption patterns places increasingly severe stress on the life-supporting capacities of our planet.”

The Millennium Ecosystem Assessment also indicates that humans have changed ecosystems more rapidly and extensively over the past 50 years than during any other period, primarily to meet increasing demands for food, fresh water, timber, fibre, and fuel, but the effects are geographically differentiated.

Integration of PHE programs can play an important role in areas where demographic trends such as growth and migration exert pressure on the environment; where degraded natural resources impact the health and livelihoods of local communities; and where a lack of effective health services, including reproductive health, threaten long-term prospects for sustainable development.

### **3.1. The Need for Integration of PHE in Ethiopia**

Achieving environmentally-sustainable development in situations of surging population growth, declining biodiversity and chronic poverty requires strategic planning, multi-disciplinary interventions and cross-sector-linked approaches that mirror the livelihood strategies of poor households and communities.

To establish the need for PHE integration in Ethiopia and to heighten our commitments for its success, we need to explore the prevailing population, health and environmental conditions and other related issues.

PHE integration in Ethiopia has a much broader meaning than the acronym suggests. In addition to family planning and conservation, program areas using the PHE integration approach are expected to deal with disaster mitigation, gender mainstreaming, HIV/AIDS programming, food security promotion, social entrepreneurship, environmental health promotion, poverty alleviation and economic development. This is not, however, to suggest that PHE integration is necessary only in response to mounting population pressures, poor health services and environmental degradation or as a disaster management mechanism. Instead, PHE integration would be more effective and less costly when it is implemented proactively as a preventive measure whenever possible.

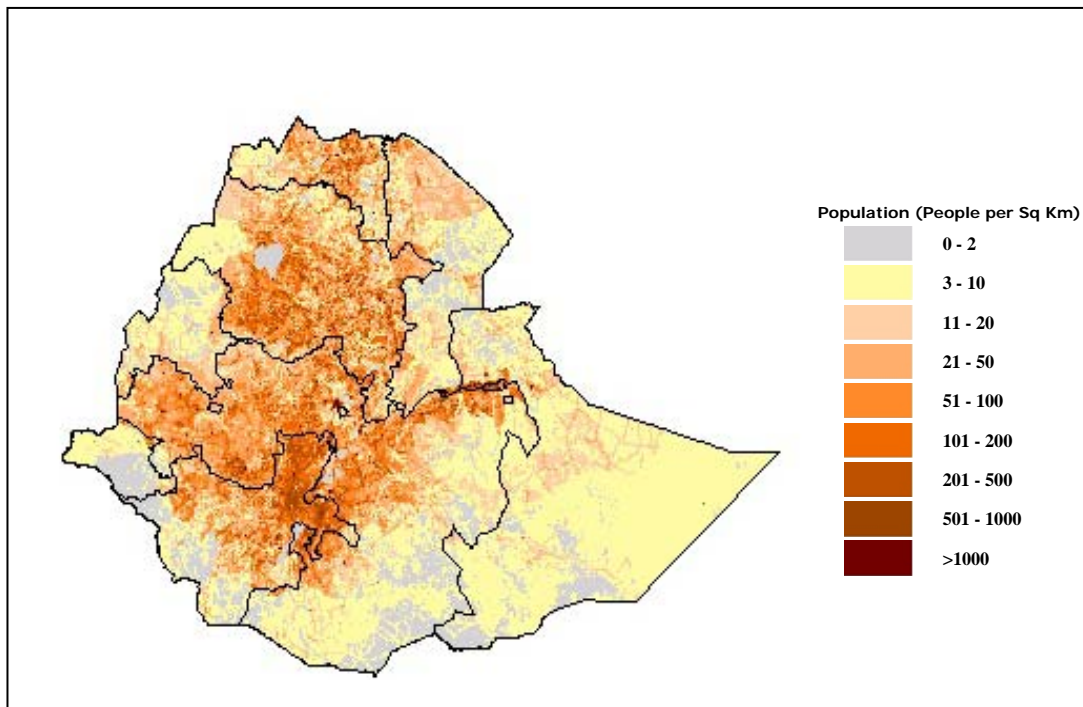
### **3.1.1. Population Growth in Ethiopia**

The population of Ethiopia has been growing at a fairly rapid rate since 1950. The population grew at an average annual rate of 2.5% between 1965 and 1980 and at 2.9% between 1980 and 1989. In 1975, the population of Ethiopia was approximately 32.2 million (Encyclopedia of Nations). The national census in 1984, which was the first accurate census for Ethiopia, revealed a population of 42 million, increasing at 2.9% per year, much larger and faster growing than previously anticipated (Central Statistical Authority, 1984). Ten years later, the 1994 census confirmed the trend, recording a population of 53,477,256 (Central Statistical Authority, 1999).

In terms of the age structure of the population, the percentage distribution of the population of Ethiopia in the 1984 census structured by age is typical of many developing countries experiencing high birth rate and declining death rate. Children under 15 years constituted 48.2% of the population while the population between 15 and 64 constituted 47.1%. Only 4.7% of the population was above 65 years. Children between 0 and 14 years old and the youth between 5 and 25 years old accounted for 62.3% of the total population of Ethiopia. The median age which was 16.3 is an indication that about half of

the population was below 16. The population pyramid which has a wide base is indicative of an age structure with a very large proportion of children and a small proportion of elderly persons. In 1994, the population of the young (0-15) was 45.4% and that of the old (65 and above) was only 3.2% of the total population.

With a relatively high growth rate of 2.7% between 1975 and 2000, the population of Ethiopia doubled reaching a total of 64,117,452 by July 2000 (Encyclopedia of Nations).



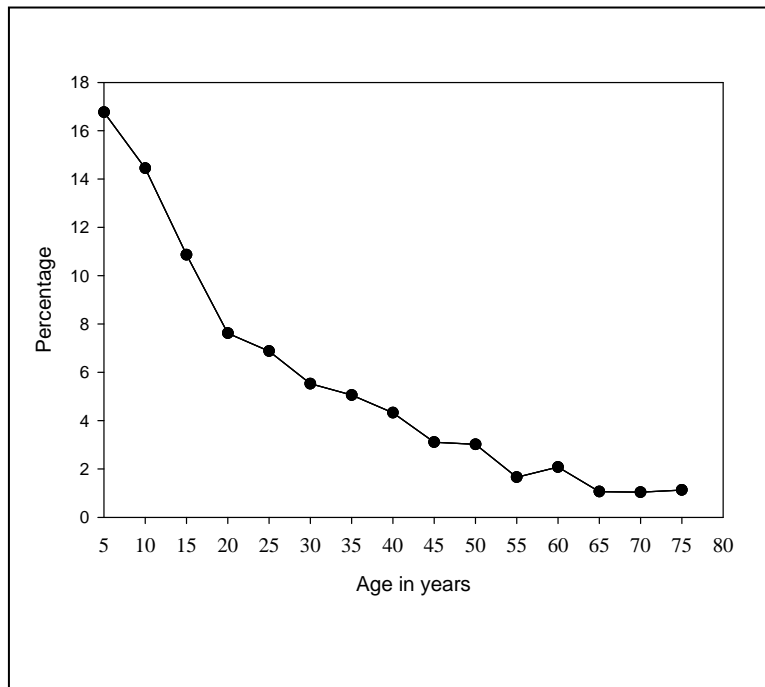
**Figure 1. Population density in Ethiopia in 2002**

The population density in 2002 was 61 per sq km (159 per sq mi) (Sonneveld and Keyzer, 2002). The area of greatest density is the central highland where more than 70% of the population lives (Figure 1). Currently, the population of Ethiopia is growing at a rate of 2.9% and has reached a magnitude of 79 million. When the population grew over 77 million in 2007, the increment exceeded 2 million per year (Encyclopedia of Nations).

The age structure of the population of Ethiopia shown in Figures 2 and 3 (drawn after CSA 1984 and 1994), is typical of a heavy burden of dependency, particularly at young

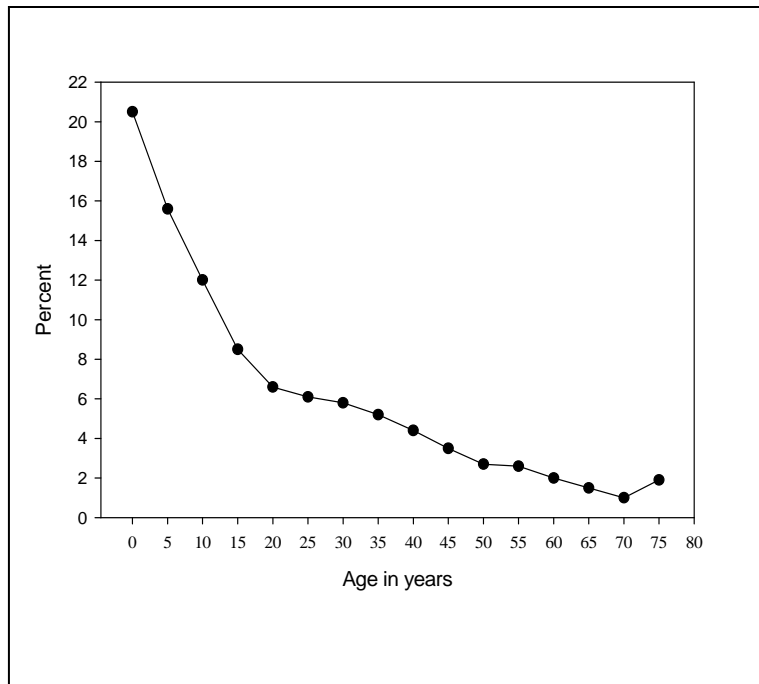
age. In 1984, roughly 111 persons in the productive age group (Figure 2) had to support 124 dependants in terms of food, clothing, health, and education. Likewise 95 young and old adults depended on 100 working age persons in 1994. This is in contrast to the situation in the developed countries where there are only about 65 dependents per 100 persons in the productive age group (CSA, 1984; CSA, 1999).

The age structure of the current population is almost similar to those of the previous census years. Forty seven percent of Ethiopians are younger than 15 years of age, 50% are between the ages of 15 to 64, and only 3% are older than 65 years of age. The life expectancy at birth of the total population is 49.03 years with 47.86 years for males and 50.24 years for females.



**Figure 2. Age structure of the Population of Ethiopia in 1984**

In Ethiopia, large family size, with its high dependency ratio, is closely associated with poverty. In particular, those families with higher numbers of children under the age of 15 years and older persons above the age of 65 seem to be vulnerable to falling into poverty (CSA and ORC Macro. 2006). This is indicative of the severity of dependency on the active labor force and the value of adult labor for the survival of rural households.



**Figure 3. Age structure of the population of Ethiopia in 1994**

If the prevailing fertility rate continues and mortality declines as would be expected under normal conditions, it is projected that the population of Ethiopia may grow at the rate of 3.1% or more a year during the remaining part of the present century and will reach 90.9 million by 2015.

At the moment, incremental growth of the population by about 2 million persons per year puts tremendous strain on Ethiopia's resource base, the economy, and the ability to deliver services. With this continuing massive addition of people, it can be much more difficult to make progress in reducing poverty, creating sufficient employment, and in raising agricultural productivity enough to keep up with food needs.

### **3.1.2. Health conditions in Ethiopia**

The health care system in Ethiopia is very poor. This is well demonstrated in the reproductive health sector. Reproductive health, like most aspects of health in Ethiopia, is generally poor, with significant regional disparities in access to services and in health outcomes. Almost 80% morbidity in Ethiopia is due to preventable communicable and nutritional diseases, both associated with low socio-economic development. Improving

the general physical infrastructure and strengthening health systems are crucial to improving health and require major investments and much time.

The diversity of socio-economic environments, climatic conditions, and terrains among regions in Ethiopia greatly impacts health conditions and outcomes. Poor health coverage is of particular concern in rural Ethiopia, where access to any type of modern health institution is limited at best. The infrastructure is underdeveloped and transportation problems are severe especially during the rainy season.

The health situation of women in Ethiopia is even more appalling. Women in Ethiopia are at a very high risk of death during pregnancy and delivery. One in 14 Ethiopian women faces the risk of death during pregnancy and childbirth with the risk being even higher among the rural poor and uneducated women (WHO, UNICEF and UNFPA, 2003). Almost all births take place at home in Ethiopia (94%) with only 6% of women delivering in clinics or hospitals. The majority of these births (61%) are assisted by a relative or some other untrained person and 5% are delivered without any assistance at all. Ethiopia's maternal mortality remains among the highest in the world, with the maternal mortality ratio estimated to be around 673 maternal deaths per 100,000 births in 2005 (CSA and ORC Macro, 2006). Less than 28% of all Ethiopian mothers receive prenatal care from a trained doctor, nurse or midwife. The quality and frequency of this care is variable; many women receive the care either too late in their pregnancy or too few times (CSA and ORC Macro, 2006).

Discrepancies in access to health services are not limited to reproductive health. Vaccination rates vary significantly between rural and urban areas; vaccination coverage in urban areas is three times that of rural areas. Malaria is a major health problem and cause of mortality and is the leading cause of outpatient visits in Ethiopia.

Infant and child mortality are equally high; one in every 13 Ethiopian children dies before their first birthday and one in 8 dies before the age of five. Across the board, mortality is lower in urban than in rural areas in Ethiopia (CSA and ORC Macro, 2006).

Besides the loss of lives of millions of children due to preventable diseases, those who survive suffer from less optimal nutritional conditions or malnutrition expressed in stunting, wasting and low weight for age. Wasting which is a condition of low weight-for-height is a reflection of malnutrition which may be caused by acute food shortage or serious infections. The prevalence of wasting at the country level is 8% (WHO, UNICEF and UNFPA, 2003). Stunting is an indicator of long-term or accumulated nutritional deficiency resulting from lack of adequate dietary intake over a long period of time, or recurrent illness. Weight-for-age, which is based on the principle that a child has an expected weight for his/her age, measures the general nutritional status of children in terms of both wasting and stunting. The prevalence of under-weight children in the country is 37.1% (WHO, UNICEF and UNFPA, 2003). Very early malnutrition in life can affect long-term mental and physical development, limit lifetime potential and productivity and create a low-income, low-consumption household in the next generation.

Like many African countries, one of the most daunting prospects that Ethiopia faces is a massive HIV/AIDS epidemic. However, infection with HIV is one area where rural areas fare better than urban areas. National HIV prevalence in Ethiopia is estimated by the Demographic and Health Survey at 1.4% among adults aged 15-49. Prevalence is much higher in urban areas (6%) than in rural areas (1%). It is twice as high among women (2%) than men (1%) (CSA and ORC Macro, 2006).

In the face of the present mounting population size and the unmet demands for reproductive health and other health services, the problems associated with the incapacity to respond adequately are likely to be even more astounding in the near future.

Nevertheless, it is comforting to learn that there is an ongoing effort to increase the number of health services institutions and enhance their capacity to provide the required services in the years to come (MoFED, 2005).

### **3.1.3. Environmental Degradation in Ethiopia**

Environmental degradation is a relatively silent and insidious encroachment on life and livelihood, increasing social, economic, and environmental vulnerability even to mild events. For example, recurrent drought, deforestation, and progressive land degradation

and desertification result in incalculable human, crop, livestock, and environmental losses, which are not easily measured by conventional disaster-loss tracking systems (Holloway, 1999). As a result, the losses caused by environmental degradation in Ethiopia are often underestimated.

In Ethiopia, much of the land is seriously degraded and ecosystem functions over a large area have been compromised for millennia. The life of peasants is rooted in the land, from which they eke out a meager existence. In the process, forests have shrunk, soils have eroded and rivers and streams have dried up.

From a scientific perspective what has happened and what is continuing to happen is fairly clear. The climatic conditions, relict forests and soil properties suggest that the vegetation cover over the highlands of Ethiopia in the distant past was mainly primary forest and glades of grasslands.

At present, as in the past, the population of Ethiopia is concentrated in the high and intermediate altitude areas, i.e., areas above 1800m, whereas such areas make up only a little over 35% of the total land surface of the country.

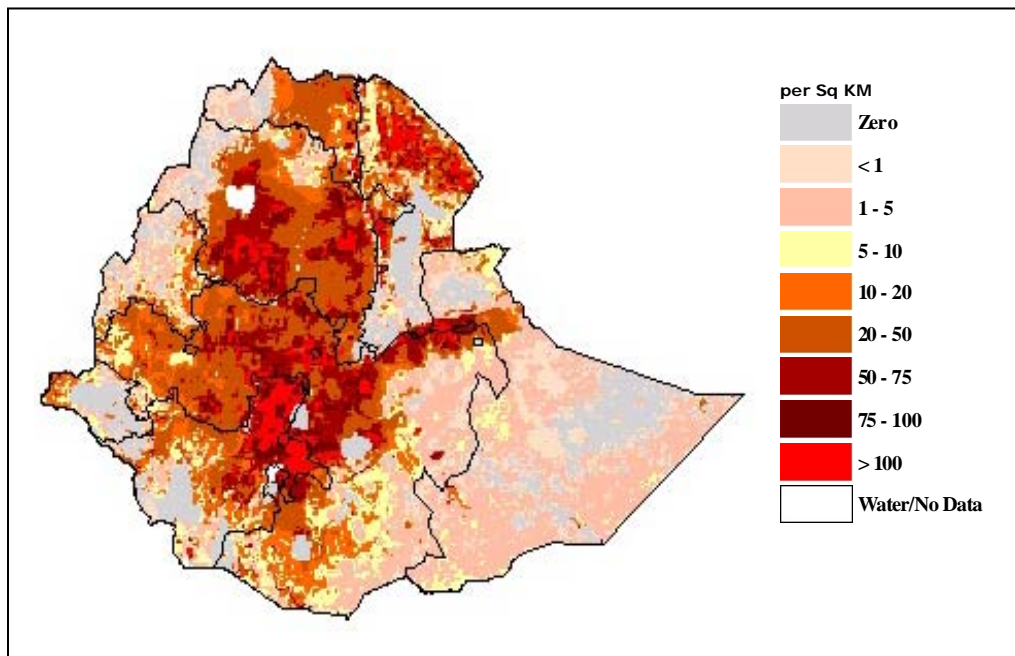
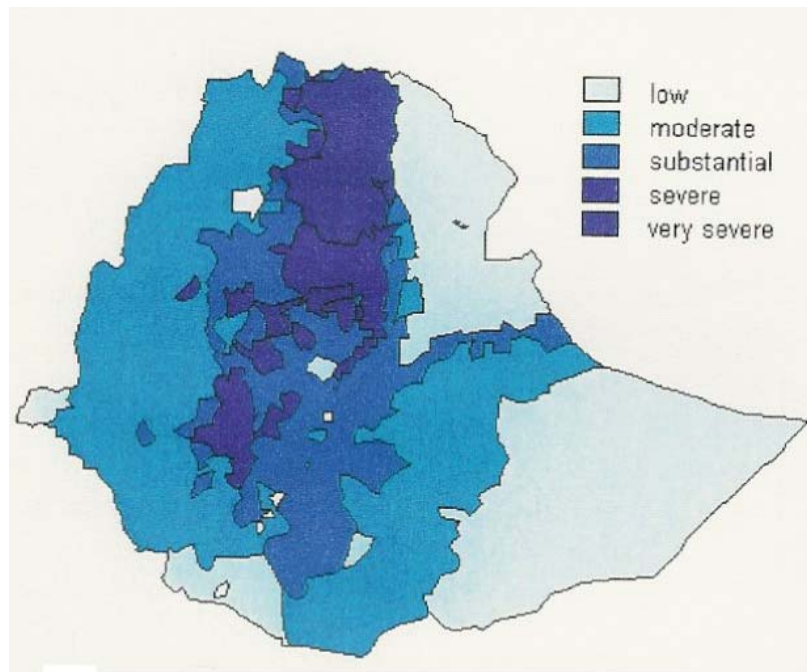


Figure 4. Livestock density in Ethiopia in 2002.

In the northern highlands ox-plough agriculture has had a long and continuous history. The nature of ox-plough agriculture necessitates a large population of livestock and land clearing for ease of plowing (Sonneveld and Keyzer, 2002). Figure 4 shows the livestock population density in Ethiopia. The large numbers of livestock for plow agriculture also de-vegetate, trample and compact the earth and expose it to wind, sun and rain.

The rate of soil erosion in the highlands of Ethiopia is quite high. Sheet erosion is reducing soil depth at a rate that, if unchecked, will render crop production impossible over large areas within the next 50 years. It is estimated that nearly 2 billion tons of soil is washed away from agricultural land every year (CSA and ORC Macro, 2006).

There are several studies that deal with land degradation at the national level in Ethiopia. The Ethiopian Highland Reclamation Study (EHRS) has shown that water erosion (sheet and rill) was the most important process and that in the mid 1980's 27 million ha or almost 50% of the highland area was significantly eroded, 14 million ha seriously eroded and over 2 million ha deteriorated beyond reclamation (EHRS – FAO, 1986).



**Figure 5. Soil erosion in Ethiopia**

However, Sutcliffe (1993) gave lower estimates for soil erosion, but emphasized the much greater importance of nutrient loss. Figure 5 (source: Hakkeling, 1989) illustrates the extent and intensity of soil degradation in Ethiopia.

These disruptions affected the natural infiltration and retention of water during rainfall leading to recurrent floods and droughts. A good number of streams, springs, ponds and wetlands have either dried up or are in poor condition. These disruptions have also reduced the ability of plants to absorb carbon and other vital nutrients thus resulting in the leaching of the fertility from the soil.

Loss of ecosystem functions and land resource productivity are serious problems in Ethiopia and the problem is likely to be even more daunting with an even higher rate of population growth in the future.

The direct effect of natural resource degradation is not only reduced crop production, fewer animal holdings, and less biomass, but also low per capita caloric intake. Resource degradation can also compel sedentary farmers and pastoralists to adopt difficult methods of cultivation, accessing water, acquiring fuel and construction material, and feed for livestock which may lead to progressive deterioration of their living standards.

On the other hand, it is gratifying to find that degraded areas in Northern Shewa, Tigray, Wollo and the Central Rift Valley can be rehabilitated to desirable conditions given the optimal treatments (Zerihun Woldu and Ingvar Backéus, 1991, Feoli, et.al., 2002a&b, Kebrom et.al, 1997, EPA, 2005). However, these are small islands of success which have to be scaled up through participation with the relevant stakeholders and decision makers.

#### **3.1.4. Loss of Biodiversity**

The topography and diverse climatic conditions of Ethiopia have led to the occurrence of habitats that harbor some unique plant species and animals and their assemblages. As a result, Ethiopia is one of the a countries in the world with the high level of biodiversity. Owing to the long history of agriculture and the diversity of the environment, Ethiopia is again one of the 12 Vavilov centers of crop genetic diversity.

The overall result of the environmental degradation in Ethiopia, whether at a local or ecosystem level, leads to desertification and its manifestations which eventually become the overriding cause for loss of biodiversity. These disruptions have meant that much endemic biodiversity has been lost and more is threatened.

As a result, some parts of Ethiopia are categorized among the 34 biodiversity hotspots of world. These are the central plateau along with similar habitats in east Africa, designated as the Eastern Afromontane Biodiversity Hotspot and eastern parts of the country along with similar habitats in the Horn of Africa designated as the Horn Biodiversity Hotspot (Figures 6 & 7). This signifies the threat of anthropogenic influences to the biodiversity which has already affected more than 75% of the designated areas.



**Figure 6. Eastern Afromontane**



**Figure 7, Horn Biodiversity**

The shift of the farming population, in particular, from the higher elevations to the lower in search of farming land had been going on for many decades. Similarly the expansion of *in situ* pastoral activities has also reduced the biodiversity rich lowlands into yet another biodiversity hotspot.

The fact that 85% of the population of Ethiopia is rural and will remain so in the years to come implies that the rural areas will carry an even greater demographic burden than at present. On the other hand, the natural resource base of the country will shrink to about 10 to 15 percent in the next fifty years. This will be reflected in the rapid rate of deforestation of the limited forest resources of the country. According to Sutcliffe (2006), the potential annual supply of woody biomass in 2000 was 77 million tons while the annual consumption (including wood as charcoal) was 54 million tons. There is an annual loss of 65,540 ha of high forest, 91,400 ha of woodland and 76,400 ha of shrubland due to land-clearing for agriculture and settlement, which amounts to woody biomass losses of approximately 3.5 million tons (Sutcliffe, 2006). As a result, ecosystem functions which encompass biodiversity, hydrological regulation, carbon sequestration, and soil fertility loss will continue impinging on the biodiversity and lead to the extinction of many unique flora and fauna of the country and the world at large.

### **3.1.5. The Economic Situation in Ethiopia**

The incidence of poverty in Ethiopia is considered one of the highest in the world. The poor continue to become poorer and the likelihood of greater numbers of them sinking into destitution is ever increasing. Most Ethiopians in rural areas are trapped in a cycle of poverty that accelerates in a downward spiral with each generation. The expanding rural population struggles to eke out a living on ever-decreasing plots of land whose fertility and productivity continue to decline. In a “normal” year, at least five million people out of the total population can be in danger of starvation. That number can rise to over 13 million people if drought or other factors cause additional shortfalls in agricultural production.

There are about 10 million pastoralists who depend primarily on grazing herds of cattle, camels, and goats, and are concentrated mostly in the dry lowland areas. Human

development indicators and poverty among this group are uniformly worse than elsewhere in the country and they have proven difficult to reach with traditional services. These pastoralists move seasonally in search of water and grazing and are often exposed to famine when drought inhibits rejuvenation of the denuded grasslands.

According to a study carried out by the Central Statistical Authority (1999) GNP per capita income in Ethiopia is less than US \$100 with 46% of the population below the poverty line. In some regions, this is as high as 85%. Small farmers, who constitute the bulk of the population, are often caught in production of low-risk/low-return food grains. With insufficient cash funds, and unpredictable outcomes, they do not venture to take the risk of diversifying from subsistence food production into potentially higher-return activities (such as growing cash crops for market), or of spending their limited cash on purchased agricultural inputs. If they fail, either because of crop failure, price collapse, or failure of demand, the basic food they would otherwise have produced, or the cash to purchase it will not be available. As a result their families will be doomed to suffer from hunger. Investing in education may be too prohibitive for poor households, because of both the direct costs as well as the fact that all members need to contribute to the family's income, including time-consuming tasks such as collecting water and firewood. Even if the returns from education can be high, the inability to finance that initial investment means that there is under-investment. Without significant increases in productivity, it is difficult for capital to be accumulated, and returning to unskilled labor is likely to grow. Poverty and low education, therefore, reproduce themselves in future generations.

For decades, this has been the general pattern of life for most Ethiopian peasants. The Government of Ethiopia is currently grappling to alleviate rural poverty under the Sustainable Development and Poverty Reduction Program (SDPRP) and its current phase, Plan for Accelerated and Sustained Development to End Poverty (PASDEP) (MoFED, 2005). PASDEP outlines sectoral and cross-sectoral policies, programs and targets for accelerated development to end poverty.

There has been encouraging progress in recent years in improving some basic aspects of life in Ethiopia. The massive push proposed in PASDEP in the area of agriculture which revolves around the effort to support the intensification of marketable farm products both for domestic and export markets is yielding some signs of improvement in food security and capital wealth accumulation.

The positive response of the economy to the initiatives of the government and the contribution of the small scale farmers to food security can be ascribed partly to the provisions extended through development of agricultural credit markets, improvement of land tenure security, support for small-scale irrigation and the reforms to improve the availability of fertilizer and seeds. However, the number of farmers registering significant improvement is infinitesimally small compared to the felt needs in food security and prevailing abject poverty. The positive achievements therefore need to be duplicated in many folds to adequately meet the needs and vigorously contribute to poverty alleviation.

## **3.2. Available Opportunities for PHE**

### **3.2.1. Opportunities in the Policy Environment**

#### ***3.2.1.1. The Constitution of the Federal Democratic Republic of Ethiopia***

The Constitution of the Federal Democratic Republic of Ethiopia, which is the supreme law of the country, sets the overall environmental values to be preserved and protected in Ethiopia.

The Constitution has provided a comprehensive basis for promoting sustainable development and has paved the way for taking subsequent actions. In effect it provides sustainable development and a clean and healthy environment as fundamental rights of citizens (articles 43 and 44). The provisions encompass among others, the right to participate and be consulted in national development programs, policies, projects and programs affecting livelihood. Citizens are also entitled to improved living standards, capacity enhancement for development and meeting their basic needs; appropriate compensation and state assistance when affected by development initiatives.

### ***3.2.1.2. Population Policy of Ethiopia***

The rationale for the National Population Policy (NPP) of Ethiopia is to match the rate of economic growth and development with that of the rate of population growth. It also sets out to integrate the efforts of achieving the rationale with other sectors directly or indirectly related to population. Objectives of the NPP include improving maternal and child health, a significant increase in contraceptive usage, and a dramatic reduction in fertility. The policy notes the need to educate people about the links between family size, human welfare, and environmental security.

The policy integrates issues of agricultural productivity, off-farm alternative livelihoods and the need to bring about a rational distribution of population commensurate with the carrying capacity. This makes the population policy quite relevant for environmental issues such as combating desertification and mitigating the effects of drought.

### ***3.2.1.3. Health Policy of Ethiopia***

The Health Policy of Ethiopia is rooted in primary health care with an emphasis on education in personal and environmental hygiene, nutrition, immunization and family planning. Specific objectives of the health policy relevant to population and environment are:

- Intensifying family planning for the optimal health of the mother, child and family;
- Accelerating the provision of safe and adequate water for urban and rural populations;  
and
- Developing safe disposal of human, household, agricultural, and industrial wastes, and encouraging recycling

Scrutiny of these objectives reveals that the health policy incorporates issues relevant to population and environment.

### ***3.2.1.4. The Environment Policy of Ethiopia (EPE)***

Because the Constitution of the FDRE ensures all Ethiopians the right to sustainable development and the right to a clean and healthy environment, Ethiopia had to develop a comprehensive environmental policy on natural resources and the environment so as to harmonize development with sustainability and to rehabilitate the degraded environment.

The Environmental Policy also paved the way to adapting and ratifying several international conventions and agreements related to the environment.

EPE emanated from the Conservation Strategy of Ethiopia, which constitutes ten-sectoral and ten cross-sectoral policy pronouncements. The general objective of the Environmental Policy of Ethiopia is to improve and enhance the health and quality of life of all Ethiopians and to promote sustainable social and economic development through sound management and use of natural, human-made and cultural resources and the environment as a whole so as to meet the needs of the present generation without compromising the ability of future generations to meet their own needs (Environmental Protection Authority, 1997).

Specific objectives of the policy emanate from well-articulated guiding principles which include the right to a healthy environment, community empowerment, creation of an enabling atmosphere, sustainable use of renewable resources, use of appropriate technology, long-term economic development, security of land tenure, regular assessment and monitoring of environmental conditions, increased environmental awareness and interdependence on environmental issues at all levels.

The most important policy pronouncements of EPE for PHE are Human Settlements, Urban Environment and Environmental Health, and Population and Environment. The Human Settlements, Urban Environment and Environmental Health sectoral policies of the EPE contains among others:

- to incorporate rural urban migration, human settlement and environmental health concerns which arise from urbanization created by social and economic development into regional, wereda and local level planning and development activities;
- to bring about a sound partnership between the government and communities in the development of an integrated sanitation delivery system, and to foster the supplementary role of NGOs;
- To integrate population planning, resources management and the rehabilitation of and care for the environment to achieve a sustainability of lifestyles;

- To tackle simultaneously the issues of poverty, health, education and empowerment as these are interlinked with those of population growth, availability and access to resources and the well-being of the environment;
- To ensure a complete empowerment of women especially to enable their full participation in population and environmental decision making, resource ownership and management; and
- To promote off-farm and on-farm income generating programs which aim at the alleviation of poverty, especially, among women whether they have access to land or not and among men who have no access to land.

### **3.3.2. The Establishment of Disaster Prevention and Preparedness Commission**

The Constitution of the Federal Democratic Republic of Ethiopia has established the Disaster Prevention and Preparedness Commission by Proclamation N° 10/1995 based on the Constitution which is the supreme law of the country. The Constitution provides the following basic human rights, namely:

- Right to Life (Article 15) - No person shall be deprived of his or her life except for serious crimes
- The Right of the Security of a Person (Article 16) - All persons have the right to protection from bodily harm;
- Environmental Right (Article 44)
  1. All persons have the right to clean and healthy environment
  2. All persons who have been displaced or whose livelihoods have been adversely affected as a result of State programs have the right to commensurate monetary or alternative means of compensation, including relocation with adequate State assistance.

The National Disaster Prevention and Preparedness Committee (NDPPC) was established under the Prime Minister's office to implement the National Disaster Policy.

The NDPPC deals with natural and man-made disasters occurring at the national level and is chaired by the Prime Minister. Its members include the Ministry of Agriculture, the

Ministry of Health, the Ministry of Water Resources and Development, the Ministry of Economic Development and Cooperation, the Ministry of Trade and Industry, the Disaster Prevention and Preparedness Commission (DPPC), the National Meteorological Services Agency (NMSA) and the Ethiopian Mapping Agency.

The National Policies on Disaster Prevention and Management (1995) has provided guidelines for reducing the impacts of drought. In addition to the provision of relief in times of acute food shortages, the guidelines contain various interventions to avert disasters. These interventions include among others conservation and retention of soil moisture and the establishment of small-scale irrigation; construction of wells; training farmers to reduce run-off and exploit ground water and encourage forestation; mobilization of drought resistant agronomic practices; fodder and water distribution; pasture development; ground water exploitation; controlled grazing; organized migration and mobile abattoirs.

The DPPC has a crisis management group consisting of nodal officers of government ministries to assist in disaster management. Relevant ministries and agencies have a designated technical person as a member of the National Committee for Early Warning (NCEW) under the Federal DPPC.

There are early warning committees at various levels of government i.e. the Federal DPPC, Regional Disaster Prevention and Preparedness Bureaus (RDPPBs), Zonal Disaster Prevention and Preparedness Departments (ZDPPDs) and the Wereda Early Warning Committee. The NCEW depends on these committees to acquire and analyze information pertaining to weather, crop, food, market trends, commodity prices, livestock conditions, water and pasture, and food and nutritional conditions.

It appears that DPPC has limited itself to disaster prevention and management and pays little or no attention to population pressure under normal conditions. There seems to be

opportunities to encourage the NPPC to also engage in reproductive health services and the prevention of the HIV/AIDS pandemic at times of disaster management.

### **3.2.3. Opportunities with NGOs Operating in Ethiopia**

Non-governmental organizations are usually non-profit organizations that gain at least a portion of their funding from private sources.

Both foreign and local NGOs can be established in Ethiopia by registering with the Government. Following registration with the Ministry of Justice and obtaining of Certificate, NGOs are required to sign an Operational Agreement with the Federal Disaster Prevention and Preparedness Commission (DPPC). After the signing of Operational Agreement with DPPC, an NGO is expected to enter into specific project agreements with the concerned regional government offices depending upon the type and the nature of the project prior to implementation. As a result of the historical background of the registration of NGOs and the persistence of NGOs after establishment, Ethiopia has become the home to many NGOs operating in different areas of health services, rehabilitation and development.

It is almost 30 years since many NGOs first began working in Ethiopia. The leading ones, both national and international, originally became involved in mitigating the effects of the droughts of 1973-74 and 1984-85. Since then, their emergency response and relief activity roles have gradually declined and today the important operations are in the fields of rehabilitation and development. Some of the larger international NGOs have withdrawn from operations and have turned themselves into donors.

There are more than 2,000 NGOs engaged in development in Ethiopia. Most NGOs in Ethiopia are organized in associations and the Christian Relief Development Association (CRDA) is the largest organization representing an alliance of over 320 local and international NGOs.

The missions of NGOs in Ethiopia are diverse, ranging from research and policy to advocacy and the environment. Most NGO investments in the health sector are in

reproductive health and family planning. The biggest investments for environmentally focused NGOs are in agriculture and food production, specifically soil and water conservation, with a smaller segment devoted to conservation and natural resources management. NGOs have also made significant contributions in the water sector, in the provision of safe water and small-scale irrigation schemes.

The NGOs in Ethiopia collaborate loosely in development and rehabilitation activities but the extent of collaboration among NGOs, the private sector and government organizations varies according to the nature of their respective operations. However, oftentimes collaboration is impeded by many factors including, in some cases, lack of a specific *modus operandi* for interaction, disagreement on priorities, and different styles of operation. Some even occasionally engage in rivalry. The contribution of NGOs is constrained by a lack of sufficient policy and program guidelines as well as inadequate mobilization of communities and stakeholders by government and program managers. At other times, activities have tended to reflect mainly the orientation and concerns of program managers and specialists, including researchers, as opposed to the concerns of those who would be directly affected by such activities. The same can be said about government organizations. This insufficient collaboration among organizations, whose inputs are expected to reach the end users almost on a daily basis, may have failed to make use of the comparative advantages of different types of institutions.

#### **3.2.4. Opportunities with Resettlement Programs**

Ethiopia has suffered more from severe and frequent droughts and associated famines in the last three decades than from the environmental degradation which has a longer history. A large portion of the country's population has been forced to depend on food aid for survival.

Since 1974, the government has increasingly relied on resettlement as a strategy for alleviating of the disaster on victims of drought, reversing environmental degradation and reducing population pressures. The Emergency Resettlement Program initiated in November 1984 in response to the 1983-85 droughts, relocated some 205,000 families

from the drought-prone northern areas of the country to the better-watered western regions. The massive and highly coercive resettlement program of the mid 1980s, which had left a bitter taste in the mouths of both donors and many Ethiopians, was terminated in 1990.

A new resettlement plan was announced in June 2003 with the aim of moving 2.2 million people over a period of three years with a rationale of improving the food security of the settlers while also providing better opportunity for rehabilitation of the abandoned areas. The program is being implemented purely on a voluntary basis, and each settler household is guaranteed assistance with packages which take advantage of PHE integration.

If the assistance packages do not include PHE integration, pressure on available water, grazing land and soil fertility will be intensified at a much higher scale. Resettlement would therefore be counterproductive to the sound environmental management and livelihood improvement programs when conducted without due consideration of the population growth rate. What is most likely to succeed, therefore, is to put in place the necessary precautionary and proactive measures which consider PHE integration focusing on improving all aspects of the livelihoods of the settlers.

### **3.4. The need for PHE Network in Ethiopia**

To achieve PHE integration, program implementers will have to form a network which can be in the form of a consortium or an association where their activities will be coordinated and facilitated.

The PHE network will constitute a broad coalition of government agencies and non-government organizations that have come together to promote their vision of healthy people living harmoniously with nature in a healthy environment.

The network will be a learning platform for sharing achievements, challenges and opportunities in policy advocacy, resource and community mobilization, research, education, communication and experience-sharing.

The network will conduct research to generate models, data and indicators which can be used for scaling-up of interventions. Most importantly, the network is expected to craft viable plans to expand, strengthen and advance capacity through training at different levels.

Specifically the network will achieve the following objectives and goals in its long-term efforts.

- It will support the development of Ethiopia, and contribute to the success of the PASDEP program and the MDGs.
- It will generate active cooperation with national, regional and international advocacy and research centers, and provide important sources of solidarity and cooperation for national-level efforts and lessons.
- It will help in narrowing the communication gap between population, health, gender and environmental organizations and activities.
- It will be a powerful learning group, because of the interchange with organizations working on PHE issues.
- It will develop coordination and collaboration between organizations and will strengthen access to information and resources.
- In general, the PHE network will increase visibility and success of developmental initiatives and campaigns.

To achieve its objectives and goals the network may need to form committees whose members specialize in and practice their respective fields such as:

1. Policy and Advocacy
2. Information, Education, Communication
3. Capacity-Building
4. Research

It is hoped that organizations will be more effective in pursuing their missions by collaborating with PHE program implementers and the PHE network.

#### **3.4.1. Developments in PHE integration in Ethiopia**

The Population Reference Bureau (PRB) conducted a 2-day workshop on coalition-building for East African PHE stakeholders in Addis Ababa, Ethiopia on November 12-13, 2007. Thirty-eight people representing Ethiopia, Kenya, Rwanda, Congo, Tanzania and Uganda participated in the workshop, with an additional five resource persons from the Philippines, Madagascar, and the United States.

PRB and the Training Resources Group (TRG) then co-facilitated a 2-day conference “Population, Health, and Environment: Integrated Development for East Africa,” with the goal of laying the foundation for the launch of an East Africa PHE Network which was announced on November 14-16.

As a follow-up to the launching of the East African PHE Network, eight participants of the conference from Ethiopia, representing NGOs, government organizations, higher education institutions, and interested individuals, formed a committee which has since been working relentlessly towards the launching of the Ethiopian PHE network.

The vision of the Ethiopian PHE network will revolve around having “a nation where poverty is eradicated, biodiversity is preserved, high quality health care is available to all citizens, and environmental resources are used in a sustainable, equitable manner.”

The mission of the network will include, among others:

- To enhance and promote the integration of PHE at various levels for sustainable development through effective networking and community empowerment.
- To advance PHE to ensure equity, health and environmental stewardship, and poverty alleviation.

At a conference to be held in May, the Ethiopian PHE network will be launched, and members will find the opportunity to participate in the noble task of working towards relieving the Ethiopian poor from their predicament and to meet the MDGs.

#### **4. Conclusion**

In Ethiopia, demographic pressure, land scarcity, land fragmentation and poor health are the underlying causes which drive the population to ever-increasing rural vulnerability and poverty. The supply of food and fuel and their resource base are under continuous threat.

However, in Ethiopia there has been very low awareness of the importance of population management and the impact of population pressures on sustainable resource management and the provision of health services. The relationship between demographic pressure and the resource base unfolds very slowly but takes place with concrete signals and devastating effects. The recurrent droughts and the consequent famines of the last three decades have highlighted the sharp dividing line between the watersheds of the natural resource base and population pressures. The balance could be tipped unfavorably by a slight push, resulting in a loss of resilience and increased vulnerability. The ecological vulnerability induced mainly by degradation of basic environmental resources has resulted in the susceptibility of Ethiopia's rural population to long-term malnutrition and disease burden. This situation has no place in the 21<sup>st</sup> century.

Evidence shows that the concern about population pressures and environmental degradation in Ethiopia arose largely because of the rapidly declining agricultural productivity and the decreasing availability of arable land. Thus the response of planners and decision makers in issuing policies and strategies related to population, health and environment have been reactive instead of the proactive. Although the issuance of these policies and strategies was long overdue, they have created an enabling atmosphere and provided clear guidelines, instilling political will for a paradigm shift which serves as a basis for engaging in a combination of development issues.

In addition, the recent proliferation of NGOs who have gradually shifted their emphasis

from relief work to development and advocacy, has increased the chance that we can achieving the common goal of delivering services which communities can easily embrace

Today, more than ever, the dire situation related to population, health and environment calls for more concerted efforts than previous isolated piecemeal approaches. There are ongoing efforts by the government to improve conditions and enhance the capacity to provide services in population, health and environment and register a dramatic reduction of poverty. There are more enabling conditions for integrating service delivery efforts to communities in a more holistic manner and it is important that we capture the opportunity quickly.

It is important to acknowledge that the Ethiopian Government, donor agencies, community-based organizations and national and international NGOs are making significant efforts to alleviate poverty, ensure food security, rehabilitate the environment and control the population growth rate. But many development practitioners do not recognize the interdependence of population and environmental issues. They are taking mostly single sector approaches with some focusing on food security, others on natural resources conservation and still others on reproductive health and family planning. Unfortunately integrated approaches remain far too unrealized.

If the NGOs and government organizations working in different sectors could team up, their efforts could furnish dual advantages. Integrating approaches builds synergies that improve outcomes more than if they were done separately. Additionally, they could increase the visibility of each member of the team at national and international levels. This, in turn, increases the chance of attracting more donors funding at the international level and the renewal of contacts at the national level.

At the recipient level, the integration of population and reproductive health interventions with environmental management would improve the health, economy and the fate of future generations. The awareness of policymakers and the public on the link between population, health and the environment would increase. This, in turn, would help policymakers address these complex long-term issues by balancing far-reaching benefits

with short-term costs. Local communities can empower themselves to effectively manage their environment while also improving education, primary health care, livelihood opportunities, and the status of women. Ultimately, these approaches will help in matching development needs with policy interventions in a rapidly changing world. Clearly, available resources may not permit doing everything to the satisfaction of the end users. Interventions in food security and population management, which should be pursued in conjunction with measures to manage the natural resource base and protect the environment, could easily be identified and entry points could be prioritized through a consensus and confidence building process. This forms the main thrust of PHE integration which is a development approach for achieving compounded growth to break out of the self-perpetuating poverty trap.

The long history of interaction between humans and their environment in Ethiopia provides a basis for developing sustainable, integrated community development models useful for PHE programs. Ethiopia's demographic, health, and environment situation make it a good candidate for PHE programming. PHE programs can benefit in many ways from forming a national network.

Ethiopia, therefore, has to quickly subscribe to PHE integration and networking to recover the lost decades in development and meet the MDGs in a span of time much shorter than anticipated.

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