



World Health  
Organization



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Environment Programme

## First Inter-Ministerial Conference on Health and Conference in Africa Health Security through Healthy Environments

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### FACTS AND FIGURES FOCUS ON AFRICA

#### **The Linkage between Health and Environment**

It is estimated that the global burden of disease, measured by the loss of disability-adjusted life years (DALYs) per 1000 persons, is heaviest in the sub-Saharan African region, with 538 DALYs, versus Latin-America and Caribbean's 190, Asia's 387, and the Eastern Mediterranean's 277.

- It is estimated that a quarter of the total burden of diseases in developing countries may be associated with environmental risk factors. Preventative environmental health measures are as important and sometimes more cost-effective than treatment (DFID/EC/UNDP/World Bank, 2002).
- In 2002, environmental risk factors accounted for 23% (2.4million) of all deaths in Africa (WHO, 2006).
- Africa is one of the regions most vulnerable to climate change and has the least adaptive capacity (UNEP GEO, 4, 2007).
- Some 60% of the world's vital ecosystem services are already degraded or under pressure and the health impacts of this situation are already being felt, particularly among the world's poor and vulnerable populations.
- Throughout the developing world, traditional medicines are the primary source of health care for up to 80% of populations (WHO, 2002). The source of traditional medicines is reliant to a large extent on the integrity of ecosystems from both a provisioning and cultural perspective (Cunningham et al., 2008, in press).

#### **Water Pollution**

- In 2002, 1.03 million deaths were attributed to inadequate water supply, sanitation and hygiene, with an additional 550,000 deaths being attributed to poor water resource management and unsafe water environments (WHO, 2008).
- Africa's renewable water resources are estimated at about 5,400 billion m<sup>3</sup> per year, of which 15% is ground water.

- Only 9% of the global freshwater resources are in Africa and these resources are geographically unevenly distributed.
- In 2004, the coverage of safe drinking water and safe sanitation was 56 and 37% of the population respectively.
- Despite an overall improvement in the coverage of water supply between 1990 and 2002, the regional projected coverage in 2015 still falls well below the MDG target of 75% (UNEP GE04, 2007). The vast majority of Africa's population will continue to rely on unsafe water sources, which themselves are exposed to increasing contamination and pollution as a result of the continent's prevailing inadequate and inefficient water management policies.
- It has been documented that 90% of the global burden of malaria and of schistosomiasis affects the population of sub-Saharan Africa, with some other water-related vector-borne diseases of a more sub-regional significance also appearing as important public health issues.

### **Outdoor and Indoor Air Pollution**

- Urban air pollution, is estimated to kill some 800,000 people annually around the world, 40,000 of them in Africa (WHO, 2007). The impact of air pollution on health is seen in the rapid increase in respiratory illnesses, heavy-metal-related illnesses, and allergies and skin diseases, which are experienced mostly by children and the poorest.
- Africa has the highest urbanization rate, with the continent's urban population doubling every 20 years (UNEP, 2007). With this, road traffic injuries cause an estimated 1.2 million deaths per annum. In addition, motorization promotes a more sedentary lifestyle, which itself is associated with diseases that cause some 1.9 million deaths each year (WHO, 2002).
- Indoor air pollution globally is responsible for the deaths of an estimated 1.5 million people annually (WHO, 2006).
- In Europe, acute lower respiratory tract infections attributed to indoor air pollution from solid fuel alone account for 4.6% of all deaths in children aged zero to four (Valent, 2004). In Africa, where the use of solid fuel indoors is much greater, there is a strong likelihood that this accounts for a significantly greater percentage.

### **Chemical Safety**

- Chemical safety has been a major challenge to the continent. The production of agricultural chemicals will remain a key focus of the African chemical industry.
- African farmers use large amounts of chemical pesticides. And as much as 50,000 tonnes of obsolete stockpiles of pesticides contaminate soil, water, air, and food both for domestic consumption and export (UNEP GEO 4, 2007).
- Farmers in Africa, are generally ignorant of the hazards posed by pesticides and frequently use them without observing the recommended precautions. Statistics of poisonings cases (although usually grossly under reported) have estimated that between 46 and 84% of all poisonings in adults are attributable to occupation or the environment, with a higher percentage, between 60 and 98%, occurring in children (WHO, 2006).

## **Waste Management**

- A study of one of Africa's largest waste dumpsites, the Dandora Municipal Dumpsite in Nairobi, found that half of the children tested in the area surrounding the dumpsite had concentrations of lead in their blood exceeding internationally accepted levels. The children had been exposed to pollutants such as heavy metals and other toxic substances through the soil, water and air, which lead to respiratory, gastrointestinal, and dermatological diseases (UNEP, 2007).