CLIMATE CHANGE AND HEALTH: CRITICAL ISSUES AND OPTIONS FOR AFRICA

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Climate change and health

Regional Weather Changes
- Temperature
- Heat waves
- Precipitation
- Extreme weather events

Modulating Influences
- Population growth
- Standards of living
- Health care facilities
- Demographic change

Disease Pathways
- Air pollution levels
- Contamination pathways
- Transmission dynamics

Adaptation Measures

Health Effects
- Temperature-related illness and death
- Extreme weather related health effects
- Effects of food and water shortages
- Air pollution related health effects
- Water and food-borne diseases
- Vector-borne diseases
Climate change and health

Policies
Courses of action or principles for guiding decisions – informed by the Libreville Declaration

Plans, programmes, legislation, and administrative processes

Climate adaption and mitigation
• Migration
• Changes in agricultural and land use practices
• Changes in urban design
• Changes in infrastructure and housing

Development and underdevelopment
• Food security and nutrition
• Water supply and sanitation
• Housing
• Energy, transport and roads
• Livelihoods, education and employment
• Medical facilities

Climate vulnerability
• Susceptibility to the effects of:
  • Increased precipitation
  • Decreased precipitation
  • Climate variability
  • Flooding or drought
  • Changes in the timing of seasons

Health
• Life expectancy at birth
• Incidence and prevalence of communicable diseases
• Incidence and prevalence of non-communicable diseases
• Malaria, meningitis, malnutrition, mental health, injury, and gender related health impacts
## Direct and indirect impacts

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<thead>
<tr>
<th>Direct</th>
<th>Climate Changes</th>
<th>Health Impacts</th>
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</thead>
<tbody>
<tr>
<td>EWEs</td>
<td></td>
<td>High levels of mortality and morbidity, change in disease prevalence and patterns</td>
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<tr>
<td>Temperature</td>
<td></td>
<td>Thermal stress, skin cancer, eye diseases</td>
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<tr>
<td>Air quality</td>
<td></td>
<td>Cardio-respiratory diseases, allergic disorders</td>
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<tr>
<td>Temperature</td>
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<td>Food availability, malnutrition, famine, infectious diseases of migrants, droughts</td>
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<tr>
<td>Precipitation</td>
<td></td>
<td>Water-borne diseases, vector-borne diseases, droughts, food and water availability</td>
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<table>
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<tr>
<th>Indirect</th>
<th>Climate Changes</th>
<th>Health Impacts</th>
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<tbody>
<tr>
<td>EWEs (+ rainfall + temperature + ecosystem)</td>
<td></td>
<td>Diseases of migrants, conflicts, food and water availability, malnutrition, famine</td>
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<tr>
<td>Ecosystem composition and function</td>
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<td>Food yields and quality, aeroallergens, vector-borne diseases, water-borne diseases</td>
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Policy implications

Gaps in knowledge:
• Climate change (uncertainties in models and projections)
• The links between climate change and health and their mechanisms (a lack of science)
• How society will develop, respond, and adapt
  – Socio-economic development will have a profound affect on health outcomes, including those health issues related to climate
  – Some of this will be adaptation, some of this will be development

A key policy question:
• What should be done differently to address health concerns across Africa given what we expect in terms of climate change?
  – In some cases it may be more of the same (e.g. the use of mosquito nets and other measures to prevent malaria)
  – In other cases effective preparation or response may require completely different approaches to health care across the continent
Africa’s Health Sector’s Policy Response

• Libreville Declaration on Health and Environment in Africa (Libreville, 2008)

• Africa Ministers of Health and Environment Joint Statement on Climate Change and Health (Luanda, 2010)

• Health and Environmental Strategic Alliance for the Implementation of the Libreville Declaration (Luanda, 2010)
“Climate and Health in Africa: 10 Years On” Workshop
Addis Ababa, April 4-6, 2011

Defining a ‘road map’ for demand-driven climate services for Africa
and recommendations moving forward from COP17 and beyond.

Over 100 participants including:

• Climate and health policy makers
• Adaptation practitioners
• Researchers
• Media
• Donors
• Providers and users of climate information across sectors.
Summary of recommendations

POLICY: support existing policies and bridge gap between policy and practice e.g. integrated health surveillance and climate observation and processing systems able to anticipate adverse effects of climate.

PRACTICE: integrate climate risk management into adaptation practice across all societal sectors.

DATA & SERVICES: tailored information services, enhanced quality control, standardization, seamlessness across sectors & needs-driven according to defined health/climate priorities as defined by African countries.

RESEARCH & EDUCATION: Ensure that climate change mitigation and adaptation strategies are informed by multidisciplinary research. Enhance capacity building, knowledge transfer and strengthen health/climate partnerships.
Thank you

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