Climate; a challenge and resource for health in the Sustainable Development Goals

Achieving SDGs for health and nutrition: Perspectives from the Field
6th CUGH Annual Conference

Madeleine C Thomson
International Research Institute for Climate and Society, Columbia University, New York.
Year 2000: The Millennium Development Goals

1. ERADICATE EXTREME POVERTY AND HUNGER
2. ACHIEVE UNIVERSAL PRIMARY EDUCATION
3. PROMOTE GENDER EQUALITY AND EMPOWER WOMEN
4. REDUCE CHILD MORTALITY
5. IMPROVE MOTHER AND CHILD HEALTH
6. COMBAT HIV/AIDS, MALARIA AND OTHER DISEASES
7. ENSURE ENVIRONMENTAL SUSTAINABILITY
8. GLOBAL PARTNERSHIP FOR DEVELOPMENT
Climate and MDGs: two agendas?

<table>
<thead>
<tr>
<th>IPCC - Change Mitigation And now adaptation</th>
<th>Predicted change in incidence of malaria</th>
</tr>
</thead>
</table>

| MDG - Malaria Prevention and Control Elimination and now Eradication | Images of malaria prevention and control tools |

- IPCC - Change Mitigation: Focus on climate change mitigation and adaptation strategies.
- MDG - Malaria: Focus on malaria prevention, control, and eradication initiatives.
Climate impacts on malaria at multiple scales: Recent and abrupt decline in the East African long rains (Mar-Apr-May)
GOING UP
Malaria incidence and temperatures have risen near Kericho in Kenya over the past 30 years; health experts are keen to know whether they are linked.

Thomson et al., (2011) Africa needs climate data to fight disease
Nature, 439, 576-579
Relevance to nutrition?

Why is Climate Information so rarely used in support of development interventions?

Gaps in:

- policy
- practice
- services
- data

Market atrophy - negligible demand coupled with inadequate supply of climate services
How is climate and environment measured?

Observations – Local – under the control of the national meteorological agencies – some data provided routinely to international datasets.
Satellite data – global and regional providers
Global Climate models – global centers
Ethiopian rainfall gauge data
a) available from National Meteorological Agency (NMA) to GTS,
b) available in near real time at NMA and
c) incorporated into archived ENACTS data and disseminated by NMA
New products combine locally calibrated satellite rainfall and temperature estimates and all available quality controlled ground-based meteorological station gauge data.

30 years – every 10 days every 10km
Enhanced National Climate Services (ENACTS) Tanzania used for Malaria Impact Assessment

Average Standardised Precipitation at National level for Tanzania using a 1995-1999 baseline
Targeted Climate Information for Decision Making

Ensuring development interventions consider the effects of a changing climate is critical across a range of sectors to demonstrate impact and sustainability. Enhancing National Climate Services (ENACTS) is a unique initiative developed by the IRI to deliver accessible climate services in Africa. The ENACTS partners developed new climate information products and training for users, enabling them to make more informed decisions with confidence.

Malaria is a complex disease, with climate acting as one of a number of possible confounders in the evaluation of malaria interventions. While drought years may help drive malaria cases down, warm and wet years may increase the difficulty of malaria control and pose a threat to the success of malaria elimination programs. The Enhancing National Climate Services (ENACTS) initiative delivers robust climate information products and training specifically relevant to the needs of public, private, and civil society actors, enabling them to use climate information to manage short and long-term risks and planning.

Rwanda’s 2020 vision for development is positioning it to create a knowledge-based economy. Major improvements in health, agriculture, and other climate-sensitive sectors, are underway, supported by investments in data and information and communication technology. To support this vision, Meteo Rwanda has partnered with the Institute for Climate and Society and others to meet the increasing demand for better climate information. The Enhancing National Climate Services (ENACTS) initiative delivers robust climate information products and training specifically relevant to the needs of public, private, and civil society actors, enabling them to use climate information to manage short and long-term risks and planning.
Strengthening National Climate Data and Information for Malaria Decision-Making in Africa

4-5 August 2014, Dar es Salaam, Tanzania
Climate and SDGS – One agenda!

GOAL 1 END POVERTY
GOAL 2 END HUNGER
GOAL 3 WELL-BEING
GOAL 4 QUALITY EDUCATION
GOAL 5 GENDER EQUALITY
GOAL 6 WATER AND SANITATION FOR ALL
GOAL 7 AFFORDABLE AND SUSTAINABLE ENERGY
GOAL 8 DECENT WORK FOR ALL
GOAL 9 TECHNOLOGY TO BENEFIT ALL
GOAL 10 REDUCE INEQUALITY
GOAL 11 SAFE CITIES AND COMMUNITIES
GOAL 12 RESPONSIBLE CONSUMPTION BY ALL
GOAL 13 STOP CLIMATE CHANGE
GOAL 14 PROTECT THE OCEAN
GOAL 15 TAKE CARE OF THE EARTH
GOAL 16 LIVE IN PEACE
GOAL 17 MECHANISMS AND PARTNERSHIPS TO REACH THE GOALS
Thank you

mthomson@iri.columbia.edu; http://Iri.columbia.edu