

Identifying Current Research/Knowledge Priorities and Gaps/Needs Related To Climate Change and Human Health

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About ATPS



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About ATPS

ATPS is a

- **Trans-disciplinary network of researchers, policy makers, private sector actors, and civil society actors.....**
- promoting the generation, dissemination and use of science, technology and innovation (STI) for African development, environmental sustainability and global inclusion.



Our focus

Improving the understanding and functioning of STI policy research and policymaking processes and systems to strengthen capabilities, social responses, and governance of STI-led sustainable development in Africa

Our Mission

Building Africa's STI capabilities for sustainable development

Our approach



Where we work

ATPS National Chapters & Focal Points



Provocations



A Series of Why?

- Why is Africa contributing the lowest in greenhouse gas emissions that cause climate change and yet they bear the greatest brunt of the impacts from the change?
- Why are African leading disease conditions such as Malaria, Ebola, etc. persisting; and leading research and treatment coming from outside?
- Why is the population of farmers in Africa high and yet we cannot feed ourselves?



Some Reflections

- Africa's ability to meet its human welfare needs, participate in the global economy and protect its environment will require considerable investment in science and innovation, in general, and engineering, in particular (Juma, 2006)



Relationship between climate change and human health



Background

- Climate change has both direct and indirect effect on human health – physical, mental, social, and general wellbeing (NIEHS, 2017).
 - For example, over 140,000 excess annual deaths were caused by global warming, with an estimated US\$ 2-4 billion/year direct damage costs to health by 2030 (WHO, 2013)



Main pathways of health impacts of climate change:

- Extreme weather-related illnesses and deaths
- Air pollution-related health effects
- Water and food borne diseases
- Vector-borne and rodent-borne diseases
- Effects of food and water shortages
- Mental, nutritional, infectious and other health effects
- Microbial contamination pathways
- Transmission dynamics
- Agro-ecosystem pathways
- Socioeconomics and demographics
- Radiation impacts

Current knowledge gaps and research needs in climate change and human health



Identified knowledge/research gaps

- Monitoring and measuring climate change impact on human health
- Socioeconomic and psycho-social aspect of health impact of climate change
- Data reliability and accuracy
- Multidisciplinary and multi-sectoral research
- Specific research into climate change and human health
- Monitoring and evaluation of response programmes and interventions

Current research and knowledge priorities in climate change and human health



Identified knowledge/research priorities

WHO Member States in 2008 passed a World Health Assembly resolution that identified five priority areas for research and pilot projects on climate change and human health. They include:

- Health vulnerability
- Health protection
- Health impacts of mitigation and adaptation policies
- Decision-support systems (institutions and networks)
- Costs of health protection from climate change (EHP, 2012).



Conclusion and Recommendations



Conclusion

It is evident that climate change has enormous negative impacts on human health especially in Africa that contributes the lowest to greenhouse gas emissions that cause climate change. While lots of research work has been carried out in the area of climate change itself as a concept and discipline, the human health aspect has not been sufficiently addressed.



Recommendations

- Need for improved multidisciplinary, multisectoral collaborations among researchers on issues of climate change and human health
- Big data acquisition in climate change and human health field
- Strengthened decision support systems- policies and institutions
- More knowledge sharing platforms on climate change and human health such as the CAAST-Net programme



Thank You

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