**Climate Change, Water and Health: Practical**

Some possible answers

***N.B. Please note that the questions might be answered in many different ways. The aim of the practical is to make you familiar with what type of health policies related to climate change exist, where you can find them, and how to discuss them with your colleagues. T***

***he provided answers are just examples; many other answers could also be “correct”. If you are in doubt, please do not hesitate to ask.***

### Question I – Major Climate Change Induced Health Threats on National Level

What do you consider to be the 3 major health (and water) related health threats in your country, which are a direct or indirect result of climate change?

South Africa:

* Increase in the occurrence of strokes, skin rashes, dehydration and the incidence of non-melanoma skin cancers.
* Increase in the incidence of water-borne diseases
* Increase in the incidence of vector-borne diseases

Bangladesh:

* Increased floods
* Increase in water-borne diseases
* Increase in vector borne diseases

### Question II – Policy implementations and policy plans

Search for online (policy) documents regarding climate change for your country. Some recommendations are given below:

South Africa

* Government of the Republic of South Africa: National Climate Change Response Website: *http://www.climateresponse.co.za/home/gp/toc*
* Department of environmental affairs and tourism. A National Climate Change Response Strategy. (September 2004) *www.saaqis.org.za/filedownload.aspx?fileid=11*
* Madzwamuse, M. Climate Change Vulnerability and Adaptation Preparedness in South Africa (March 2010). <http://www.boell.org.za/downloads/HBF_web_SA_28_2.pdf>
* White paper on national climate change response: [*http://www.info.gov.za/view/DownloadFileAction?id=152942*](http://www.info.gov.za/view/DownloadFileAction?id=152942)

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An organisation that has done a lot of research and feasibility studies to climate change, water and health in South Africa is CSIR. You might consider adding them to your search strategy.

Bangladesh

* General Economics Division, Planning Commission, Government of the People's Republic of Bangladesh & UNDP Bangladesh. *Policy Study on The Probable Impacts of Climate Change on Poverty and Economic Growth and the Options of Coping with Adverse Effect of Climate Change in Bangladesh.* (2009).http://www.plancomm.gov.bd/The%20probable%20impacts%20of%20climate%20change%20on%20poverty%20and%20economic%20growth%20and%20the%20options%20of%20coping%20w.pdf
* Ministry of Environment and Forests, Government of the People's Republic of Bangladesh. *Bangladesh Climate Change Strategy and Action Plan 2008.* (September 2008) http://www.sdnbd.org/moef.pdf
* Ministry of Environment and Forest, Government of the People’s Republic of Bangladesh. *National Adaptation Programme of Action (NAPA)* (September 2005) http://unfccc.int/resource/docs/napa/ban01.pdf

An organisation that has done a lot of research and feasibility studies to climate change, water and health in Bangladesh is BCAS. You might consider adding them to your search strategy.

### Describe one of the major policies that have been implemented in your country, in the last decades, with the aim to mitigate, reduce or prevent health problems related to climate change.

### South Africa:

### *White paper on national climate change response*

* Recognising that the nutritional status of individuals is key to building resilience to environmental health threats, ensure that food security and sound nutritional policies form part of an integrated approach to health adaptation strategies.
* Strengthen information and knowledge of linkages between disease and climate change through research.
* Develop a health data-capturing system that records data both at spatial and temporal scales and that ensures that information collected can be imported into multiple-risk systems such as the South African Risk and Vulnerability Atlas (SARVA).
* Improve the bio-safety of the current malaria control strategy. Although the current strategy, which includes the use of the persistent organic pollutant, DDT, has proven effective in reducing the incidence of malaria, there are significant concerns about its long-term impacts on environmental and human health.
* Strengthen the awareness programme on malaria and cholera outbreaks.
* Ensure that national, provincial and municipal coastal management plans incorporate relevant climate information and geographic information systems and adopt a risk-based approach to planning that anticipates the consequences of the continued migration of communities into high risk coastal areas.
* Develop Disaster Risk Management plans that take into account the potential consequences of climate change along the coast, particularly the increased incidence of extreme weather events.

Bangladesh

* Construction of cyclone shelter
* Development of drainage systems
* Riverbank protection
* Deep tube well water supply for irrigation and rainwater harvesting for supplementary irrigation
* Use indigenous knowledge to prevent diseases under changing situation
* Hygiene promotion
* Distribution of water purification tablets
* Emergency preparedness programme
* Promote use of rainwater

### Describe one of the policy plans are still in the pipeline for implementation in the next few years (this could also be recommendations by professional bodies that have not yet been accepted by the policy makers).

### South Africa:

National Level

(for example) Recommended by Heinrich Böll Stiftung Southern Africa

A key concern in the health sector relates to increases in Malaria and schistosomiasis prevalence. To address these expected challenges current measures towards reduction of malaria and schistosomiasis in South Africa will be strengthened by:

* Factoring climate change impacts into the existing disease monitoring and forecasting;
* Increasing the use of bed nets and other personal protection measures against mosquito bites;
* Extending prevention measures, the spraying programme other conventional malaria control measure to new areas;
* Strengthening access to basic water and sanitation so as to reduce exposure to schistosomiasis, cholera, gastro-enteritis and other water borne diseases.

Bangladesh

Recommendations from General Economics Division, Planning Commission, Government of Bangladesh & UNDP

* Intensify flood protection measures
* Improvement and expansion of drainage system
* Promote rainwater harvesting
* Establish water treatment plant for desalinisation of water
* Water and storm resistant trees
* Construction of multipurpose flood shelters
* Improvement of early warning dissemination
* Ensure pure/safe drinking water
* Prevention of waterborne diseases
* Installation of community based sanitary latrines at flood free places

### Do you think the policy described under A is effectively addressing the climate change problems? What do you think is most remarkable in the countries approach?

### South Africa:

### They stress on “official” recognition of the problem, assuming that the problems might have been brought under the attention quite recently (since 2004 SA has a climate change policy in place). Focus on research/data capturing, so more effective strategy has yet to be defined. Interventions are not very detailed yet; more detailed plan should be expected in the future, while current activities focus on research, needs assessment etc.

Bangladesh:

In Bangladesh climate change issues have long ago been recognised and policies/proposed activities are already very specific (such as latrines at flood free places etc). However, it is difficult to say from these policy documents if there is also an operational plan to execute the proposed activities (e.g. prevention of waterborne diseases)

**Question III: Recommendations**

Based on the information you gathered about your country, what would be your main policy recommendation for the next 5 years? Why?

South Africa:

* Intensifying the interventions to prevent malaria, including bed net distribution, education programmes, spraying etc (within the ecologically friendly limits)
* Drainage systems (various levels) for minimising breeding places

Bangladesh:

* Very high need for flood protection and evacuation plans (including the appropriate facilities for temporarily displaced populations)
* Promotion of rainwater harvesting to address drought and water salinity problems

**Further reading**

* Parry ML *et al* eds. (2007). *Climate change 2007: Impacts, adaptation and vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change.* Cambridge, Cambridge University Press
* WHO (2009) *Protecting Health from Climate Change: Global Research Priorities,* Geneva, World Health Organisation.
* Intergovernmental Panel on Climate Change (2008). *Climate change and water.*  IPCC Technical Paper