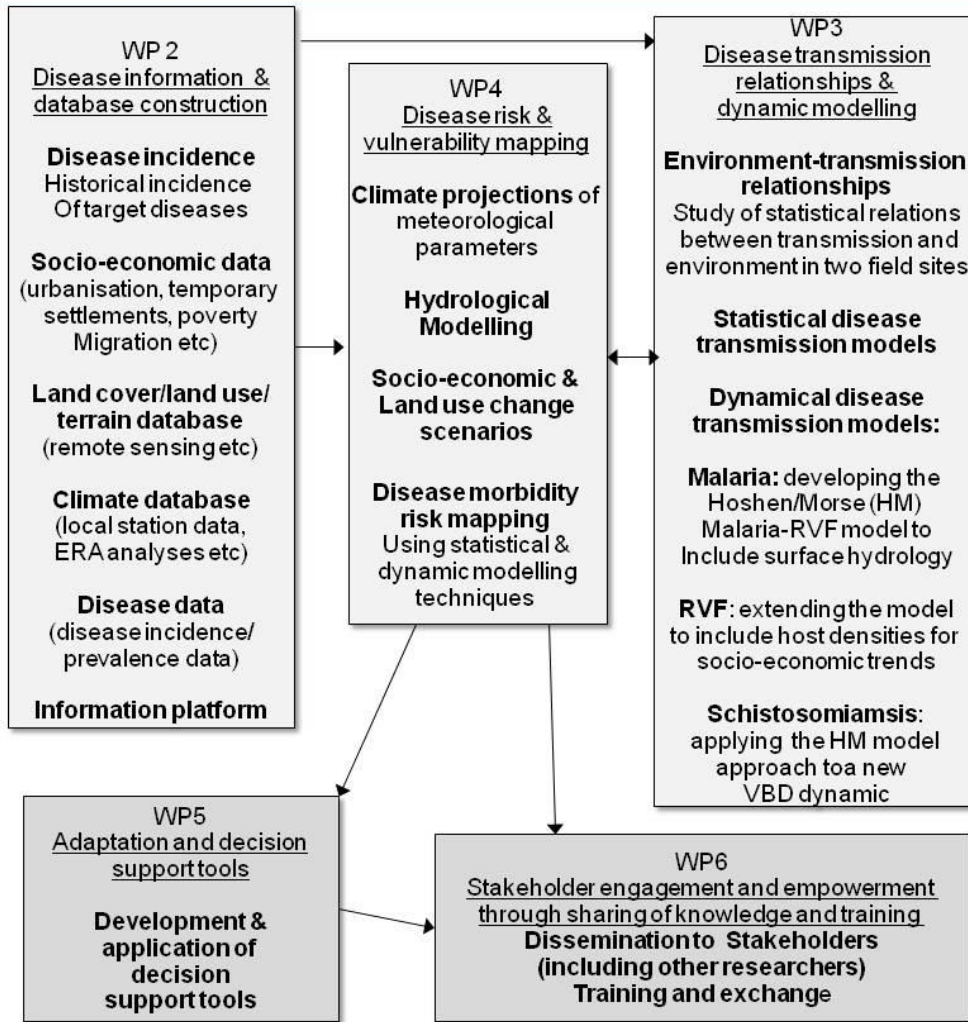


WP 1: Project management



Consortium comprises climate modellers; environmental scientists & historians; geospatial scientists; human and veterinary health scientists, public health workers and social scientists.

Research, dissemination and project management activities grouped into seven Work Packages (WPs)

WP 7: Enhancing research synergy & application

<http://www.healthyfutures.eu/>

HISTORICAL STUDIES AND THE ROLE OF CLIMATE CHANGE IN DISEASE PATTERNS

- Historical insights are informing and shaping discussions on the relative importance of climatic versus non-climatic factors in the prevalence and transmission of VBDs
- Historical studies have tended to emphasise the greater importance of non-climatic factors

e.g. in his examination of the histories of malaria, yellow fever and dengue, Reiter (2001: 141) claims that 'climate has rarely been the principal determinant of their prevalence or range; human activities and their impact on local ecology have generally been much more significant'

HISTORICAL STUDIES AND THE ROLE OF CLIMATE CHANGE IN DISEASE PATTERNS

- Historical studies on the decline of **MALARIA** in Europe are contributing to the debate

➡ Complexity of separating interrelated factors

➡ The importance of **PLACE**

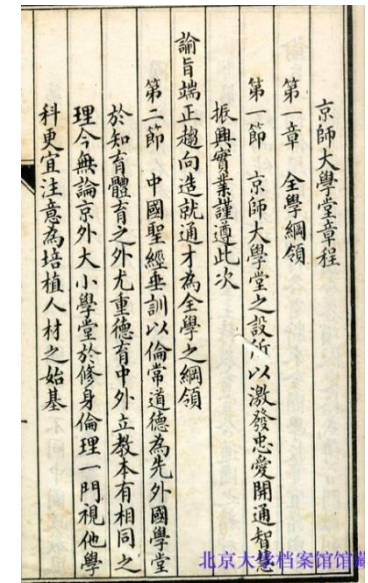
e.g. non-environmental factors (including improved living conditions, changes in household size, increased numbers of farm animals – enabled by new winter fodder crops and developments in selective breeding) responsible for the mid-18th century decline of malaria from northern Europe (Hulden and Hulden, 2009; Carter and Mendis, 2002; Reiter, 2001)

e.g. environmental factors, including climate, responsible for the decline of malaria in England during 19th century (Bruce-Chwatt and de Zulueta, 1980; Reiter, 2000; Kuhn et al., 2003)

- Continuing debate on the role of climate change on changing incidence of malaria in eastern African highlands

DISEASE THROUGH DOCUMENTS

- Historical documents are an important tool in examining the historical patterns of disease
- Limited in depth analysis of archival sources to identify and map past patterns of disease to include environmental change
- Written records tell of infectious disease outbreaks triggered by consequences of both higher and lower temperatures
- Analysis of the Chinese imperial archives over the past 8 centuries indicates 35% more occurrences of major epidemics during colder periods than during warmer periods (McMichael, 2012)
- McMichael (2012) outlines how the historical records indicate that cold periods, which have occurred more frequently and abruptly than warm periods, have been more detrimental to human health, survival and social stability than have increased temperatures



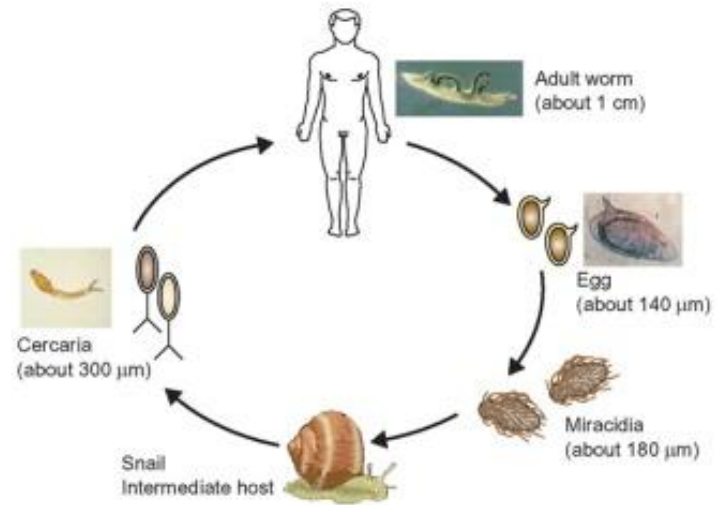
DISCOURSE

Written or spoken communication or debate

Discourses are seen to affect our views on all things

- Can affect incidence of disease
e.g. Schistosomiasis, Egypt

Sanitation and social methods of control replaced by snail control and mass treatment of human populations after the discovery of the snail as an intermediate host



Huge increase in bilharzia between 1937 and 1967

Deeply ingrained view that tropical diseases, and social behaviour were climatically-driven meant that education and social change were thought likely to be ineffective

DISCOURSE

- Health inequalities that persist today
e.g. ‘Tropicality’: Emphasised the difference between temperate and tropical, between conceived healthy and unhealthy places
Health and disease continue to be attributed to particular geographies.

Bankoff (2001: 29) argues that “‘tropicality’, ‘development’ and ‘vulnerability’ form part of one and the same essentialising and generalising cultural discourse: one that denigrates large regions of the world as dangerous – disease-ridden, poverty-stricken and disaster-prone’

Antibiotic-resistant diseases, HIV/AIDS, emergence of new viruses e.g. Ebola

HEALTHY FUTURES HISTORICAL DATABASE

- Last c. 100 years
- Range of archival sources, including: colonial reports, private papers, ministry files

‘During April 1900 a number of people in and about Nairobi
contracted malaria’

John Ainsworth, East Africa Diaries, 1895-1945

RH: MSS.Afr.s.377-381

HEALTHY FUTURES HISTORICAL DATABASE

‘In May and June 1926, a couple of months after the start of the long rains, a most virulent epidemic of malaria hit Nairobi. Everyone firmly believed that Nairobi was completely free from malaria and this indeed seems to have been the case until then’

T. Farnworth Anderson, Reminiscences of Colonial Medical Service in East Africa, c. 1925-56
RH: MSS.Afr.s.1653

‘Epidemic’ often used to address political necessity rather than a term defined through consideration of empirical data

e.g. Epidemics in Nairobi and the European-settled highlands of Kenya in 1930s and 1940s ‘were clearly articulated in areas of economic and political significance’ (Snow et al., 1999)

HEALTHY FUTURES HISTORICAL DATABASE

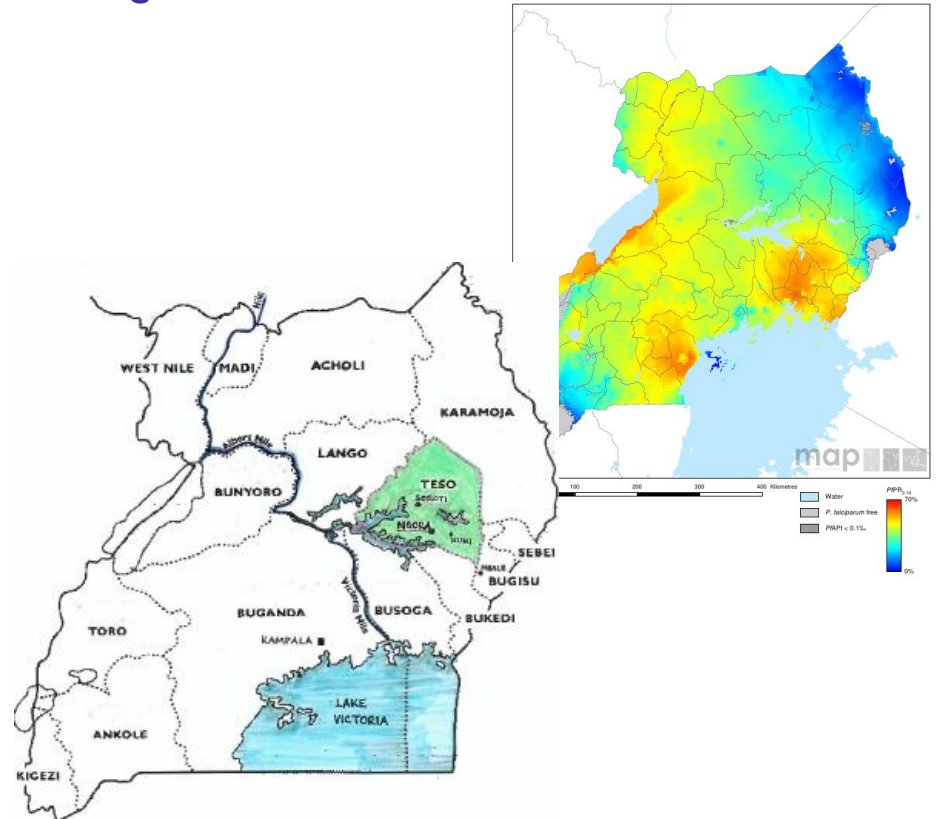
Archival documents for **early C20th Uganda**: malaria is not mentioned as a major health problem, particularly among the African populations.

- Up to 1930s: diseases such as plague, smallpox and sleeping sickness mentioned
- Efforts to control malaria targeted at protecting colonial staff.

e.g. ‘There is a great amount of disease, much of it apparently curable and preventable, existing among the natives. Of the diseases, plague, small-pox, Leprosy, Cancer, and Syphilis are common and seen in advanced stages. Plague and small-pox are the only diseases of which the extent can be gauged ...’

DC’s annual report on Teso District for 1914-1915

UNA: PP/Y26: 19



HEALTHY FUTURES HISTORICAL DATABASE

By the 1930s: malaria cause of approximately 25% of ‘Epidemic, endemic and infectious diseases’ in Ugandan hospitals

Annual Report on the Social and Economic Progress of the People of the Uganda Protectorate 1935

UNA: Colonial Reports Annual

By 1942, malaria was being described as ‘the most important of all diseases’

Annual Report of the Medical Department for 1942

UNA: MoH

HEALTHY FUTURES HISTORICAL DATABASE

Was the *apparent change* in importance of malaria in early-mid 20th century Uganda an effect of:

- reporting differences due to a greater interest in the health of indigenous people
- climate change
- changes in socio-economic factors
- relaxation of earlier interventions
- some combination of factors?

SOME CONCLUDING THOUGHTS

- Historical analysis of archival documentary sources can:
 - Provide a broader perspective on disease patterns and their causes than can other methodologies
 - Uncover insights into the vulnerabilities of past societies and their responses to, and perceptions of disease and changing environments – which may help inform how to manage the possible future health impacts of global change

- The cause and effect mechanisms of VBDs are much more complex, dynamic and difficult to unravel than two polarised positions of an either/or debate

- The importance of place