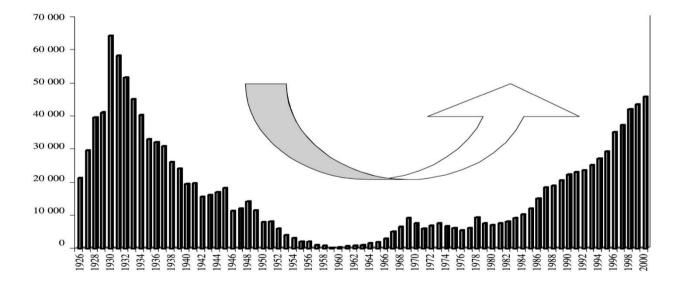
# **Response to Epidemics.**

#### **MARLEEN BOELAERT**





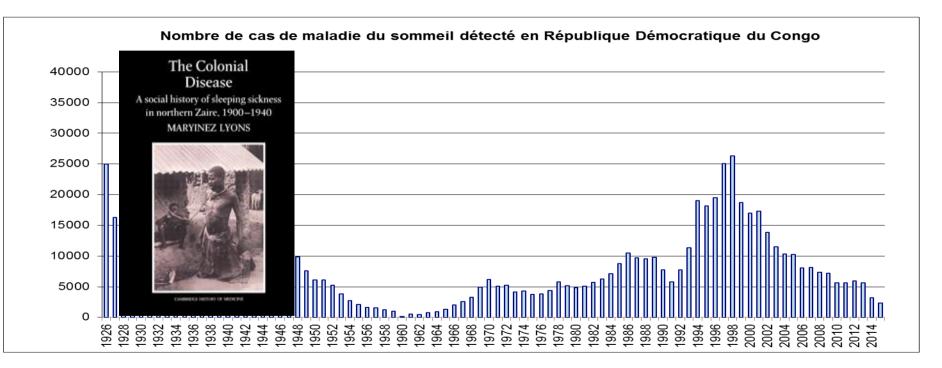
#### Number of sleeping sickness cases in world (1926 to 2000)



×

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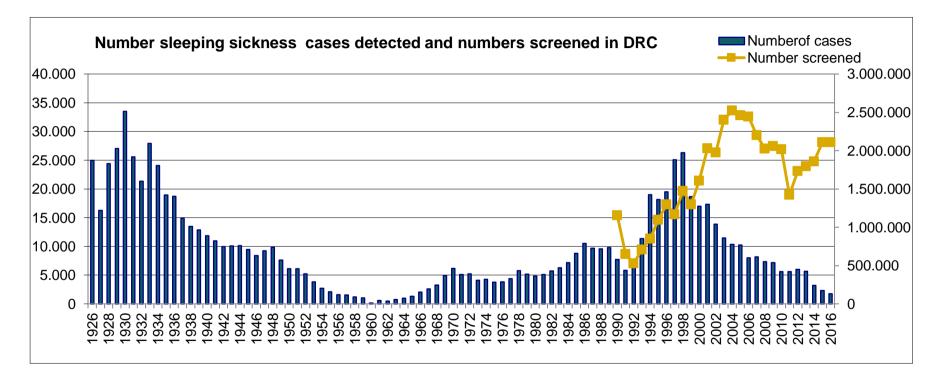
## The political history



3





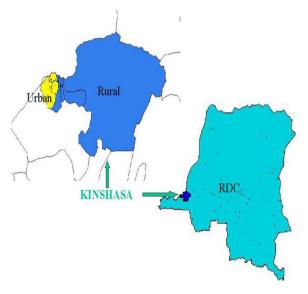




#### **Urbanisation of sleeping sickness in Kinshasa, DRC?**



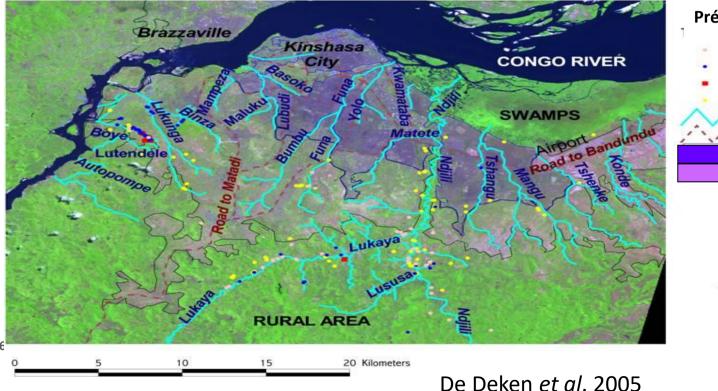
956 cases in urban residents between 1996 and 2000



Ebeja et al 2003; Robays et al 2004



## **Or...ruralisation of Kinshasa**?



#### Présence de tsé tsé (96-04) DAD < 1 DAD = 1 - 3 DAD > 3 Presence (DAD unknown) Rivers Main roads Urban area



## **Urban yellow fever in Latin-America**



- Yellow fever virus maintained in "forest cycle" in monkeys
- Can spill-over to human habitat
- Devastating urban epidemics early20th century Latin-America
- Effective vaccine
- Brazil, Dec 16-Mar17: 1500 'cases', 241 deaths. Death rate 34 % in confirmed cases. Rural! Risk for urbanisation?

#### 1998 Urban yellow fever in Santa Cruz, Bolivia



1998. Six cases in urban residents. Five deaths. Local transmission. Van der Stuyft P et al Lancet 1999 **Response**: mass immunisation by local authorities



#### Forced migration.



Cholera epidemic Goma, RDC 1994

- 1 mio refugees
  50,000 deaths in 4 wks
- No drinking water

# Massive international response

The Goma Epidemiology Group . Lancet 1995

#### Ebola in Guinea: role of health systems

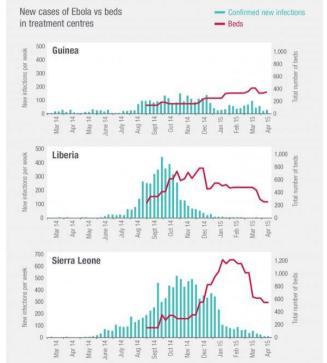


#### Ebola response: out of sync with the outbreak

The Ebola outbreak had already begun to escalate in the summer of 2014, but the number of beds in treatment centres only picked up in the autumn of 2014.

#EbolaResponse

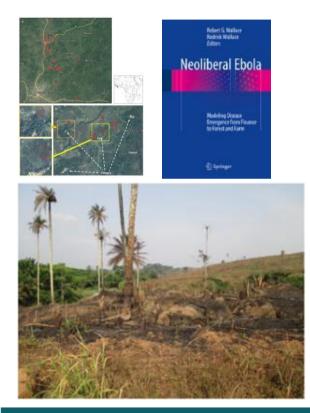
odi.org/ebola-response



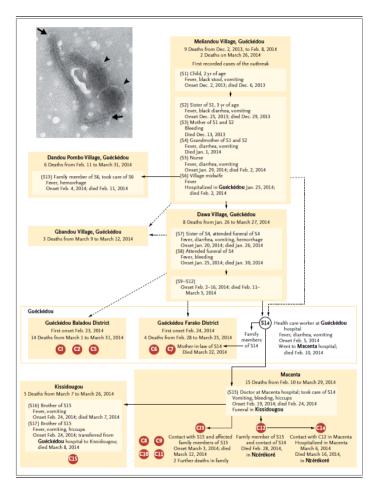
A lot of emphasis on weak health systems -- as amplifyer of Ebola epidemic in Guinea,

- on their inadequacy to respond,
- on destructive impact of Ebola on general health status and access to care

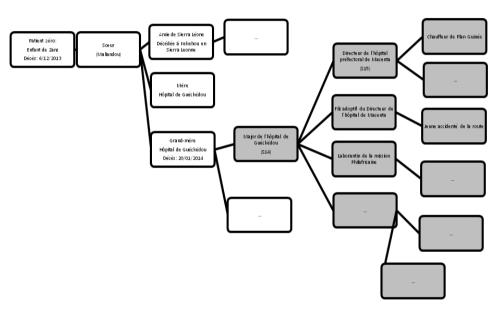
#### Ebola in Guinea: role of globalized agro-economics



- Wallace hypothesis: agroeconomic policy of industrial palmtree plantation creates new eco-niche. Growing interface humans-bats
- Monoculture enhances risk for spill-over virus from animal reservoir to humans



#### **Response to Ebola in Guinea** GOARN including social anthropologists *"Une affaire de Kisséens "*Thys et al 2017 forthcoming



© Massachusetts Medical Society and Copyright Clearance Center, Nov 21, 2016 Baize *et al.* (2014)



#### Discussion

On response to epidemics

- Health system can set up effective outbreak responses
- Social determinants of impact at micro, meso and macro-level
- Disease dynamics connected with political history and global economy. Emergency health crises and required immediate response should not blind us from the bigger picture and structural root causes
- The unthinkable has happened and will happen again
- Politics matter, as does global solidarity



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