

# THE IMPACT OF CLIMATE AND WEATHER ON THE PREMODERN PROVISION OF FOOD AND WATER

New Historical Perspectives on Resilience and Vulnerability



## DIGITAL COLLOQUIUM

organized by Daniel Moerman en Lena Walschap as part of the N.W. Posthumus Research Network *Societies in Context: Interactions between humans and rural-urban environments*

**16 FEBRUARY 2022**

**REGISTER FOR ZOOM ACCESS**

**N.W. POSTHUMUS** INSTITUTE

WEDNESDAY  
16 FEBRUARY 2022

N.W. POSTHUMUS INSTITUTE

SESSION 1

13:00–13:50

OPENING WORDS

ALBANE LESOUPLE

*Université de Bourgogne and Universiteit Antwerpen*

Food from Somewhere ? Urban Households, Access to Land and  
Alternative Food Entitlements in the Late Medieval City

SESSION 2

14:00–15:15

LENA WALSCHAP

*KU Leuven and Universiteit Antwerpen*

Seas of Risk and Resilience. Peasant fishing on the late medieval  
English coasts as a coping strategy for climate-induced hazards.

ARNOUD JENSEN

*Universiteit Antwerpen*

From Farmland into Sea. Urban institutions in late medieval Ghent  
dealing with inundation during the Flemish Civil War.

SESSION 3

15:30–17:00

ANGELA ISOLDI

*Radboud Universiteit*

Coping with drought in Mamluk Cairo: the case of 1399

DÁNIEL MOERMAN

*Vrije Universiteit Amsterdam*

Coping with drought in premodern urban hydrosocial systems: The  
case of Deventer's well communities, 1500–1900.

## DIGITAL COLLOQUIUM

*The Impact of Climate and Weather on the Premodern Provision of Food and Water: New Historical Perspectives on Resilience and Vulnerability*

Food and water are essential goods for human and animal life. The provision of these goods to society has always been prone to climatic and environmental shocks, such as drought, floods, and extreme weather circumstances (Pfister, 2010). Recent studies have made clear that premodern societies were, however, not inherently vulnerable to such shocks, and that they did not necessarily lead to major shortages and further disaster. (Gerard & Petley, 2013; Pfister, 2009; Van Bavel et. al., 2020) Instead, urban and rural societies in the Middle Ages and early modern period could develop methods and strategies to enhance the resilience of food and water provision, thus averting disaster (e.g. Gerard & Petley, 2013; Prybil, 2017). However, resilience and vulnerability remain complex concepts when studying societies in the past. Multiple, often interacting levels of resilience can be denoted in the form of deliberate strategies deployed by certain individuals and collectives, as a 'disposition' or habitus of specific groups and individuals, or material and immaterial resources of wealth and information across different layers of society (Soens, 2020). In this colloquium, several researchers will approach the topic of climate and weather-induced stress on water and food provision by looking at the interaction of these levels of resilience and vulnerability through a number of case studies related to both rural and urban societies. Doing so, this colloquium aims to contribute to recent historical debates regarding the resilience and vulnerability of premodern societies, as well as the question how the development differed across multiple levels of society (Soens, 2018; Van Bavel, Curtis & Soens, 2018).



Images: Sebald Beham, The Weather Peasant (c.1542)

## ALBANE LESOUPLE

*Food from Somewhere ? Urban Households, Access to Land and Alternative Food Entitlements in the Late Medieval City*

## ABSTRACT

I attend to find how did the medieval people use the city and its spaces to develop their own agriculture, responding to particular issues? Indeed, the period was marked by instability due to climatic conditions, wars and the economy. Access to food was therefore central for the people of this time. Thus, studying how the land allowed the inhabitants of the city to feed themselves should allow us to better understand the dynamics of the markets at the end of the Middle Ages, moreover, the market is seen as the main source of food for urban people.

But what if food supply did not contract, but rather expanded as food markets developed? What if dependence on food markets became linked to low social status? After all, the social fabric of late medieval cities was both characterized by the rise of the 'corporate' middle classes and the provision of alternative, land-based food products could be one of the instruments by which this 'middle' class tried to emulate the social elites, leaving the food market to the lower strata of urban society. However, the whole society is very heterogeneous, and not only reduced to these three categories. Urban supply is also a gateway to approach this complexity. Such an observation would significantly alter our understanding of 'imperfect' food markets and failed food policies. Similarly, with regard to access to land, the literature at our disposal has very often been used to show that urban elites used to accumulate land in and outside the city, for social advancement as well as for investment of their capital. The productive capacity of land is often downplayed, or presented as a simple strategy for the city poor. However, direct cultivation of land in the city and on the outskirts, through in-kind deliveries by rural tenants or family members, or through access to urban commons are all different ways of accessing food outside the market for different social groups. —

## BIOGRAPHY

Albane Lesouple is a PhD researcher on the project 'Food from Somewhere? Urban Households, Access to Land and Alternative Food Entitlements in the Late Medieval City', from the university of Antwerp, led by Tim Soens. This project concerns three European cities: Ghent, Norwich and Dijon. I am in charge of the Dijon case, under the supervision of Tim Soens and Martine Clouzot.

**Contact:** [albane.lesouple@uantwerpen.be](mailto:albane.lesouple@uantwerpen.be)

*Seas of Risk and Resilience. Peasant fishing on the late medieval English coasts as a coping strategy for climate-induced hazards.*

## ABSTRACT

All across the globe, coastal communities are facing increased risks because of climate and environmental change. A similar dynamic existed in the later middle ages, when periods of increased climatic instability marked the onset of the Little Ice Age. Both historical and environmental studies have considered the sea merely as a danger, due to storm floods causing the destruction of buildings, infrastructure and agricultural fields along the coastline. The sea could however also provide opportunities, as access to fishing could provide income and sustenance in times of increased uncertainty due to storminess and harvest failures. While fishing history did consider the resources of the sea, its attention has remained on the rise of specialisation and scale enlargement. This narrative of transition to commercial fishing has overlooked the diverse alternative fishing patterns and strategies that persisted around the European coasts, despite the related difference in vulnerability or resilience of coastal communities, economic outcomes and pressure on fish stocks. Combining the insights of the vulnerability and resilience perspectives with fishing history in an aim to overcome the shortcomings of both, my research challenges the dominant image of peasants as exceptionally vulnerable by exploring peasant fishing activities as a coping strategy. This paper explores examples of the many ways in which coastal peasants could combine their farming activities with fishing, in order to examine whether this reduced the risk of living on the English coast in times of climate change between the mid-thirteenth and mid-fifteenth century.

## BIOGRAPHY

Lena Walschap is a PhD researcher at KULeuven and the university of Antwerp, working on late medieval socio-economic and climate history. She is currently an FWO fellow working on the vulnerability and resilience of fishing farmers on the English coastlines to climate induced hazards; under supervision of Maïka De Keyzer and Tim Soens.

**Contact:** [lena.walschap@kuleuven.be](mailto:lena.walschap@kuleuven.be)

## ARNOUD JENSEN

*From farmland into sea. Urban institutions in late medieval Ghent dealing with inundation during the Flemish Civil War.*

## ABSTRACT

Around the 24th of august 1488, the Nieuwersluys, a sluice in the Artois-dike in the region of the Vier Ambachten in Flanders, succumbed, causing seawater from the nascent Western-Scheldt to flood the close-by lands. Repairs were sabotaged by local militia – the county of Flanders was at the time involved in a bitter war – and what started as a relatively small inundation, was soon exacerbated by the notorious autumn storms that plagued the region. Storms and bad weather caused the water to submerge almost the whole Asseneder-Ambacht, overtaking many small villages and valuable farmlands. Only around 1494 – after the war –, repairs began. However, the still-expanding Western-Scheldt, the yearly storms, lack of funds and political events slowed the process and asides from some small parts, most lands would only be reclaimed in the 19th and 20th century.

These once-fertile lands were often possessed by great estates – hospitals, abbeys, churches –, who were depended on these farmlands for revenue – and more importantly: provisioning. How did these large estates cope with the inundation and the aftermath, which came at a period of already heightened vulnerability due to the raging war, recurring epidemics and famines caused by bad harvests and political embargoes? Through studying the accounts of four different institutions of Ghent, it became clear that both the vulnerability and the resilience of the institutions was determined at one hand by coincidence, but also – mostly – by the institutional domain management, geography, the organisation of the institution itself, its agency and its social capital. Each institution was impacted differently, due to differences in the above factors and each institution recovered differently, by applying a mix of the above factors.

## BIOGRAPHY

Arnoud Jensen is currently a doctoral student, affiliated with the Centre of Urban History, Department of History, at the University of Antwerp. He specialises in late medieval socio-economic history, with a focus on socio-economic inequality, the history of social care, disaster history, environmental history and rural history. He has worked previously on societal and institutional resilience in the late medieval Low Countries.

**Contact:** [arnoud.jensen@uantwerpen.be](mailto:arnoud.jensen@uantwerpen.be)



ANGELA ISOLDI

*Coping with drought in Mamluk Cairo: the case of 1399*

## ABSTRACT

In the year 802 AH/1399 CE, a drought caused the water level of the Nile to be so low that people could walk across the river. Potable water, which water carriers took from the Nile and brought to the city, became much more expensive than usual. This drought followed a series of disasters that had hit the Mamluk Sultanate during the second half of the 14th century, including successive outbreaks of the plague (the last of which in 1381) and a famine (in 1375). Yet, despite the crisis caused by these events, at the end of the 14th century the city of Cairo seems to have not been in a state of decline but rather in a lively phase of urban development. This paper wants to analyse the social and economic consequences of the drought of 1399 in this particular context through the eyes of the Egyptian scholar al-Maqrīzī (d.845/1442), who witnessed and recorded the events of this difficult period in two major works, the *Kitāb al-Sulūk* and the *Khiṭaṭ*. In fact, every time the Nile did not reach its plenitude and the lack of flooding resulted in a deficient crop, the price of water and foodstuffs dramatically increased, reducing the possibility for the urban population to purchase potable water. Meanwhile, the general food and water scarcity also affected the functioning of the elite's charity initiatives, which played a pivotal role in providing water and food to the poor. Therefore, I will focus on the repercussions of the drought on different social groups and the interaction between them, including the coping practices adopted by the ruling class and the elite in order to fulfil the needs of Cairo's inhabitants. Moreover, I will investigate the role of private initiatives in dealing with drought-induced water shortage and the consequences of drought on the life of workers whose job was dependent on water, such as water-carriers and bathhouse keepers.

## BIOGRAPHY

Angela Isoldi is a PhD-Candidate at the Radboud University Nijmegen within the project: 'Source of Life: Water Management in the Premodern Middle East (7th-15th Century)', specialising in Medieval Cairo.

**Contact:** a.isoldi@let.ru.nl

## ABSTRACT

This paper wants to present a new approach of looking at the social aspects of drought within premodern urban environments by applying the idea of hydrosocial systems. The idea of a hydrosocial system regards water as something that is 'both shaped by, and shapes, social relations, structures and subjectivities' (Linton & Budds 2014). In this paper, the idea of hydrosocial systems is introduced and criticised as a means to unearth the dynamic interplay between water as an indispensable resource and the socio-political configurations within a premodern city. The primary aim is to show how coping with drought became part of the premodern urban hydrosocial system, by using the city of Deventer, in the eastern-Netherlands, as a case study. From the Middle Ages to the late 19th century, Deventer primarily depended on groundwater extracted through a system of private and communal wells and pumps. The communal wells were managed by communities responsible for the upkeep of the wells/pumps, and the latter were also important with regard to fire-fighting. In times of drought, the hydrosocial system of the city came under pressure by the increased risk of disastrous drought fires, and dried-up wells causing water shortages throughout the city. This paper will illustrate how the hydrosocial system of Deventer reacted to drought by implementing a variety of strategies to mitigate the possible disastrous effects of drought-induced water shortages. These risk-mitigating strategies consisted of an interplay between well communities, the city government, and various officials. They became part of a repeated set of strategies that resulted in a hydrosocial system that became more resilient to drought in the long-run. Focusing on hydrosocial systems thus increases the possibility to assess the socio-political factors that allowed premodern water supply systems to become more or less resilient to drought.

## BIOGRAPHY

Dániel Moerman is a PhD-candidate in the NWO-sponsored project 'Coping with Drought: An environmental history of drinking water and climate adaptation in the Netherlands', at the VU. His research focuses particularly on cities in the eastern Netherlands, in which he applies his expertise as an early modern historian specialised in socio-cultural approaches to crisis and resilience with an environmental twist.

**Contact:** d.j.moerman@vu.nl