

Missions for sustainability: New approaches for science and society

## Session abstract

### Template for session organizers

The session abstracts should provide a brief overview of the session scope and design and a **synthesis of the key discussion points and results** of each session. They should always position the issues addressed in **relation to the main themes** of the conference.

The session abstracts will serve to prepare a **conference documentation** for dissemination to the interested general public (PDF). They may equally be used as a basis for producing a summary in other formats (multimedia). In addition, these abstracts will inform a **position paper** on mission-oriented research and innovation, prepared by the Leibniz research network after the event.

Please do not attribute statements to individual participants (results-oriented abstract)

Please use accessible language / English only

Total length: ~1500 words

### Session organizer(s)

Jun.-Prof. Dr. Tina Asmussen, Deutsches Bergbau-Museum Bochum  
Prof. Dr. Matthias Hardt, Leibniz Institute for the History and Culture of Eastern Europe (GWZO)

### Session title

Missions for Sustainability from a historical perspective

### Session description (~500 words)

This session consisted of three short presentations and a general discussion. The first presentation by Matthias Hardt started with an explanation of the term “Mission” in the light of Christian missionary activities from the early medieval period onwards. He then turned to the institutional framework of those missionary activities, the monasteries,

which at the same time were strongholds of agricultural knowledge and its perpetuation from antiquity. He showed the development of monastic living and working communities in the eastern Mediterranean and their spread throughout Europe. Especially the Frankish Kingdom stimulated the expansion of these monastic institutions from the 8<sup>th</sup> century onwards. Prayers and strict working condition were combined with literary education in these monasteries, the *Scriptoria* formed places of the tradition of ancient and Arabic knowledge. He then continued with the Benedictines, who became powerful landowners, only surpassed by the king. Their fields were primarily used for the cultivation of cereals, with the consequence of a remarkable demographic growth. Matthias Hardt demonstrated the effects of that growth highlighting the transformative effects on landscapes east of the Elbe and Saale region. Especially the erosion of soil, floodings and diseases were typical effects of this abundant cultivation. Reflecting on and considering the unintended consequences of mission-oriented approaches to sustainability was the concluding point of this paper.

The second talk by Pietro Omodeo addressed Sustainability in the Light of Venice's Hydrological Culture in the Early Modern Period. Starting with the long history of artificial water regulation systems in Venice and the need to preserve them, Omodeo pointed out how the regulation of the rivers transformed waterscape and landscape in profound and irreversible ways. Especially the regulations sanctioned by the city's administration on water management and control showed not only their concern with aspects that we now call sustainability but also had a remarkable participatory element, such as the interviews with local fisherman. As Omodeo pointed out, as early as 1537 we find a decree by the Water Officers that shows the consultation of local knowledge from fishermen. This underlines the importance of the history of hydrocultural management for today, as participation looms large.

Tina Asmussen started her presentation with the argument that in contrast to the modern period there was no clear-cut distinction between renewable and non-renewable resources. Natural philosophers but also practical miners perceived minerals and metals as vital and regenerative materials. It was believed that they grow in the underground similar to plants and were influenced by the planets. They were perceived as gifts of God and subjected to divine providence. This dynamic and religious conception of mineral matter cannot be understood with a modern utilitarian and economic understanding of resources, far more it was intertwined with cosmological ideas moral virtues and spiritual beliefs. Tina Asmussen further mentioned that long before the enlightenment and the industrial revolution people cared and reflected and cared about resource use and consumption. Her conclusion was that this very different conception of mineral resources in the past should remind us today not to generalize and universalize a western, modern, rational and secularized understanding of science, technology, and innovation. Provin-

cializing this understanding is urgently needed not only when considering the preindustrial past but also when it comes to the discussion of mission-oriented approaches in global perspective.

### Main discussion points and reflections (~500 words)

After the three lectures, the three speakers had a vital discussion on different topics. Three points shall be highlighted: First, how to trace and investigate the unintended effects. Considering unintended effects need an interdisciplinary approach with methods from the humanities and natural sciences. The second major discussion point was the role of Christianity, and religion in general, as an important factor of shaping people's perceptions of nature and their own place in it. This aspect is often excluded when speaking about nature, the environment or sustainability. The third point was the importance to reflect on sustainability missions not only as a top-down process but also as a bottom up. The participatory element which was underlined by Omodeo and Venetian water management needs to be more fully incorporated for today's discussion of sustainability missions. This also counts for the important of the commons in political, economic and public discussion on sustainability missions.

### Main results and conclusions (~500 words)

Mission oriented approaches need to....

...include possible unintended consequences of "Missions for Sustainability" into our planning processes today.

...include participatory knowledge and policies of the commons.

An important mission for mission-oriented approaches for RTI is to decolonize the past and provincialize the present

Unfortunately, the session on historical aspects of sustainability missions could not raise the attention and interest of the conference participants. For the future we have to find a different way of how to implement a more holistic perspective on sustainability missions.