Maasai Mara Science and Development Action

The aim of the Maasai Mara Science and Development Action is to develop a platform that will support a large-scale interdisciplinary research programme for integrative conservation and development in the Maasai Mara.

Large nature areas in Africa and their uniquely rich megafaunas are subject to complex interactions with the human societies in which they are embedded, involving both cultural, socioeconomic, organizational and political dimensions. At the same time, the ecosystems have their own inherently complex dynamics also impacted by anthropogenic climate change, with the famous wildebeest migration in Masai Mara-Serengeti providing a key example.

While rich megafaunas with large annual migrations were once common across the Earth, they now form a unique African heritage and survives only in a declining, small part of the continent. Masai Mara hence constitutes a unique and irreplaceable part of Africa’s nature. Allowing it and other megafauna-rich ecosystems to persist in an increasingly human-dominated world will require the development of integrative approaches. These approaches must go across disciplines to tackle the complexity of external and internal societal and natural factors that now affects these ecosystems and concurrently develop a sustainable society. All these factors together will determine the dynamics and ultimately the fate of these ecosystems.

The framework built in the Maasai Mara Science and Development Action, will have broad applicability and relate to many global challenges of ecological sustainability in a world with ever increasing human population and resource use. The challenges of the Maasai Mara may thus be local, but the perspectives are global.

By focussing on a specific global challenge The Maasai Mara Science and Development Action is a new case-driven approach to interdisciplinary research. The multi-stakeholder founding group will ensure effective knowledge exchange and impact of the research.

The Masai Mara-Serengeti ecosystem is globally unique. Maasai Mara in the south-west part of Kenya is world famous for The Big Migration, where millions of wildebeests migrate from the Serengeti plains in Tanzania to eat the juicy grass of the Maasai Mara. Such large-scale migrations by large herbivores were common in the past in many part of the world. Today, the great Masai Mara-Serengeti migration is one of the few great migratory systems remaining and the only one involving such a rich diversity of wild large animals. This unique place on earth is now at risk of disappearing.
AN INTERDISCIPLINARY RESEARCH INITIATIVE AT AARHUS UNIVERSITY

The Maasai Mara Science and Development Action (MMSDA) was founded in 2014 by an interdisciplinary group of researchers across the four faculties at Aarhus University.

Business and Social Sciences

- Professor Børge Obel, Interdisciplinary Center for Organizational Architecture (ICOA)
- Director of Development Pernille Kallehave, Interdisciplinary Center for Organizational Architecture (ICOA)
- Associate Professor Dorthe Døjbak Haakonsson, Department of Business and Technology /ICOA
- Professor Jacob Eskildsen, Head of department, Department of Business and Technology/ICOA

Science and Technology

- Professor Jens-Christian Svenning, Ecoinformatics & Biodiversity, Department of Bioscience
- Professor Henrik Balslev, Ecoinformatics & Biodiversity, Department of Bioscience
- GIS Coordinator Peder Klith Bøcher, Ecoinformatics & Biodiversity, Department of Bioscience
- Professor Jørgen E. Olesen, Department of Agroecology

Arts

- Associate professor Jan Ifversen, Vice Dean for knowledge exchange, internationalisation and strategy, Arts
- Professor Andreas Roepstorff, Interacting Minds Centre
- Professor Peter C. Kjærgaard, Centre for Biocultural History
- Assistant professor Casper Andersen, Centre for Biocultural History
- Postdoc Jessica Hartel, Centre for Biocultural History
- Assistant professor Lars Bach, Interacting Minds Centre, Department of Culture & Society, ARTS and ICOA
- Assistant Professor Panos Mitkidis, Behavioural Economics and Experimental Anthropology, Interacting Minds Centre, Department of Culture & Society, ARTS and ICOA

Health

- Professor Dorte Haubek, Department of Dentistry.
AN INTERNATIONAL FOUNDING GROUP

A founding group of partners from international universities, business and other Kenyan stakeholders has been established, consisting of:

- Aarhus University (Denmark) [www.au.dk/]
- University of Nairobi (Kenya) [www.uonbi.ac.ke]
- Maasai Mara University (Kenya) [www.mmarau.ac.ke]
- Justus-Liebig Universität Giessen (Germany) [www.uni-giessen.de/cms]
- Karen Blixen Camp Ltd. [www.karenblixencamp.com]
- Maasai Mara Wildlife Conservancies Association (member to be appointed)
- The Maasai community.

A board has been established:

- Professor Børge Obel, Aarhus University
- Vice-Chancellor, Professor, Mary K., Walingo, Maasai Mara University
- Professor and Nobel Laureates Richard Samson Odingo, University of Nairobi
- Landowner David Noosaron, Mara Rianda Community
- Chairman of the Board, Jesper Stagegaard, Karen Blixen Camp Ltd.
- Maasai Mara Wildlife Conservancies Association (member to be appointed)

A PRELIMINARY CATALOGUE OF RESEARCH IDEAS

A number of research ideas have already been developed by researchers from various disciplines. These research ideas/projects could form the start-up projects in 2015 (if funded):

**Organization audit and design of the collaborative community of Maasai Mara**
Professor Børge Obel and Associate Professor Dorte Døjbak Håkonsson, Interdisciplinary Center for Organizational Architecture, Business and Social Sciences, Aarhus University and Visiting Professor Charles Snow, Penn State, USA

**The Maasai Mara ecological network in an Anthropocene and landscape-scale context**
Remote sensing to monitor and study ecosystem dynamics and degradation in the Maasai Mara
Professor Jens-Christian Svenning, Ecoinformatics & Biodiversity Group, Department of Bioscience, Science and Technology, Aarhus University

**Ethno-botanics/zooloogy and studies of local knowledge**
Professor Henrik Balslev, Ecoinformatics & Biodiversity, Department of Bioscience, Science and Technology, Aarhus University

**Sustainability, research, and conservation in the Masai Mara**
Professor Peter C. Kjærgaard, Professor of Evolutionary Studies & Director
Jessica Hartel, Post Doc and Assistant professor Casper Andersen, Centre for Biocultural History, Aarhus University

**Micro and Macro Explorations in the Maasai-Mara Eco-system**
Assistant Professor Lars Bach, the Interacting Minds Centre (IMC), Department of Culture and Society, ARTS and the Interdisciplinary Centre for Organizational Architecture (ICOA)
Assistant Professor Panos Mitkidis, assistant Professor of Behavioural Economics and Experimental Anthropology (joint appointment): Interacting Minds Centre, Department of Culture & Society, ARTS, Interdisciplinary Centre for Organizational Architecture (ICOA), BSS, Aarhus University and Center for Advanced Hindsight, Social Science Research Institute, Duke University, USA.

**Influence of diseases on wild populations and risk estimation**
Prof. Dr. Michael Lierz, DZooMed, DipECZM(WPH), DipECPVS.
Klinik für Vögel, Reptilien, Amphibien und Fische, Justus-Liebig- Universität Giessen, Germany

**Impacts of climate change and human ecological transformation of the Maasai Mara on societies**
Alice A. Oluoko-Odingo, Senior Lecturer, with PhD in Agricultural Geography, Department of Geography and Environmental Studies, Univerity of Nairobi, Kenya

**THE PROCESS**

**Summer 2014**
Interdisciplinary research group at Aarhus University develops the Maasai Mara Science and Development Action concept together with Karen Blixen Camp Ltd, Kenya.

**December 2014**
Founding group seminar at Karen Blixen Camp, Kenya.

**April 2015**
Summit at Maasai Mara University (22.-23. April): stakeholders and researchers identify challenges and present research ideas and results
Workshop (24.-25. April): White Paper describing the challenges will be developed. A 10 year research program proposal will be described.

**May 2015**
Presentation of the Action to representatives from the EU-Commission and programs (Horizon 2020, Biodiversity for Life, EuropeAid - European Development Fond, EU-Africa Research and Innovation Partnership).

**July 2015**
Donor seminar in Nairobi.
For more information, please contact Professor Børge Obel, Interdisciplinary Center for Organizational Architecture (ICOA), Aarhus University bo@icoa.au.dk, +45 20207355

Pernille Kallehave, Head of Development, Interdisciplinary Center for Organizational Architecture (ICOA), Aarhus University, peka@icoa.au.dk, +45 21605659.