









Integrating Mitigation and Adaptation Strategies to enhance agriculture, fisheries and food security in the African Continent



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According to the Fifth Assessment Report (AR5) produced by the Intergovernmental Panel on Climate Change (IPCC), climate variability and extreme events have been affecting African countries in a variety of ways. Increases in temperature, erratic and erosive rainfall and soil erosion are leading to damages to ecosystems and its endogenous resources (land and sea) have been negatively influencing ecosystems services. Current trends are also posing a threat to the stability of food systems, leading to shortages in respect of food availability and accessibility. Climate Change is also impacting fisheries and fisherman communities. The recent impacts of El Niño on eastern African countries have showed the urgency of concerted action in these fields (agriculture and fisheries).

It is widely believed that the promotion of sustainable land use practices, the identification of alternative ways to gain livelihood from the use of agriculture, of smarter use of forestry resources and of the means to enhance and upkeep income generation, are essential in attempts to enhance food security in the African continent. In particular, the means to cope with crop failure still need much attention. Also, understanding the fluctuations in marine fish stocks, sustainable use of marine resources and the management of fisheries is fundamental in the species and ecosystems conservation together with fishers' communities' sustainable use.

Climate Changes interfere in social and economic organization and change local cultures. In this context it is very important to understand how local communities relate to the natural resources and ecosystem services: How they understand, explain, deal and use natural resources? What are the impacts of their reduction, loss or its value? A more holistic understanding of local needs and their relation to climate change shows the need for the development of different public policies, incorporating local knowledge and citizenship participation into their design, fostering community-based solutions.

The above state of affairs illustrates the need for a better understanding of how climate change affects agriculture, food security and fisheries in Africa, and for the identification—and dissemination-of processes, methods, projects and tools which may help the countries and the communities in the continent to adapt. There is also a perceived need to showcase successful examples of how to cope with the social, economic and political problems posed by the climate change in African countries, especially reliable ways of enhancing food security among local communities, sustainable fisheries and the sustainable livelihoods into fisheries artisanal communities.

Highlighting this background and the specificities of local communities in African countries the "SYMPOSIUM ON CLIMATE CHANGE, AGRICULTURE, FISHERIES AND FOOD SECURITY IN AFRICA" is being organized by the Research and Transfer Centre "Applications of Life Sciences" of the Hamburg University of Applied Sciences (Germany), Manchester Metropolitan University (UK) and the International Climate Change Information Programme (ICCIP), University of Aveiro (Biology Department) in cooperation with Lúrio University (Faculty of Natural Sciences) in Mozambique. The Symposium will be a truly interdisciplinary event, mobilizing scholars, social movements, practitioners and members of government and non-government agencies, undertaking research and/or executing projects focusing on agriculture, fisheries and food security in African countries.

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The "SYMPOSIUM ON CLIMATE CHANGE, AGRICULTURE, FISHERIES AND FOOD SECURITY IN AFRICA" will focus on "Integrating Mitigation and Adaptation Strategies to Enhance Sustainable Agricultural Practices, Sustainable Fisheries and Food Security in the African Continent", meaning that it will serve the purpose of showcasing experiences from research, field projects and best practice to foster sustainable agricultural, sustainable fisheries and food security under a climate change context among countries in the continent, which may be useful and/ feasible of being implemented elsewhere. This is a high calibre event, and all contributions will be peer-reviewed.

AIMS

Consistent with the need for more cross-sectoral interactions among the various stakeholders working in the field of climate change in Africa, the aims of the "SYMPOSIUM ON CLIMATE CHANGE, AGRICULTURE, FISHERIES AND FOOD SECURITY IN AFRICA" are as follows:

- **I.** To provide research institutions, universities, NGOs, government agencies and enterprises from African countries with an opportunity to display and present their works in the field of climate change, agriculture, fisheries and food security;
- **II.** To foster the exchange of information, ideas and experiences acquired in the execution of climate change mitigation and adaptation initiatives and projects related to agriculture, fisheries and food security, especially successful initiatives and good practice across the continent;
- **III.** To discuss methodological approaches and experiences deriving from case studies and projects, which aim to show how measures to enhance agriculture, fisheries and food security may be implemented in practice;
- **IV.** To strengthen participants' networking and provide a platform so they can explore possibilities for cooperation.

Last but not least, a further aim of the event will be to document and disseminate the wealth of experiences available today. To this purpose, the book "Integrating Mitigation and Adaptation Strategies to enhance agriculture, fisheries and food security in the African Continent" will be published, with all accepted papers. This will be a further volume of the award-winning book series "Climate Change Management" published by Springer, which since its creation in 2008 has become the world's leading book series climate change on management: http://www.springer.com/series/8740. The decision of the editors as to which papers may be selected and undergo peer review for the book is final.

Papers focusing on Fisheries and Coastal Areas will be published in a Thematic Issue of *Journal of Integrated Coastal Zone Management / Revista de Gestão Costeira Integrada* http://www.aprh.pt/rgci/

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ORGANISERS

Chairperson

- Professor Walter Leal, Hamburg University of Applied Sciences (Germany) and Manchester Metropolitan University (UK);
- Professor Amadeu Soares, University of Aveiro (PT);
- Professor Harith Farooq, Lúrio University (MZ).

Co-Chairs

- Professor Ulisses M Azeiteiro, CFE, University of Coimbra and Universidade Aberta (PT);
- Professor Fernando Morgado, University of Aveiro (PT).

Scientific Committee

- Professor Salomão Bandeira, Depart. de Ciências Biológicas, Universidade Eduardo Mondlane, Maputo, Moçambique;
- Professor Fátima Alves, Universidade Aberta and CFE-UC University of Coimbra, Portugal;
- Professor Ana Pinto Moura, Universidade Aberta and GreenUP/CITAB-UP, Portugal;
- Professor Garrick E. Louis, Jefferson Science Fellow, Office of the Secretary, Special Representative for Global Food Security, US Department of State, USA;
- Professor Edmundo Gallo, FIOCRUZ, Brazil;
- Doctor Divaldo Rezende, University of Aveiro, Portugal;
- Dr. Hassan M. El Shaer, Desert Research Center, Egypt;
- Professor Justice Nyamangara, Chinhoyi University of Technology, Zimbabwe;
- Professor Pantaleo Munishi, Sokoine University of Agriculture, Tanzania;
- Dr. Martin Moyo, ICRISAT, Zimbabwe;
- Catherine Mungai, CGIAR Research Programme on Climate Change, Agriculture and Food Security, Kenya;
- Dr. Michael W. Musa, Ahmadu Bello University, Nigeria;
- Professor Nicholas Oguge, University of Nairobi, Kenya;
- Dr. Adebisi-Adelani Oluyemisi, National Horticultural Research Institute, Nigeria;
- Dr. Olawale Emmanuel Olayide, University of Ibadan, Nigeria;
- Dr. Maren Radeny, Regional Programme Coordinator, CGIAR Research Programme on Climate Change, Agriculture and Food Security, Kenya;
- Dr. K P C Rao, ICRISAT, Ethiopia;
- Professor Belay Simane, University of Addis Ababy, Ethiopia;
- Dr. Isaac K. Tetteh, Kwame Nkrumah University of Science & Technology, Ghana;

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- Dr. Menas Wuta, University of Zimbabwe, Zimbabwe;
- Professor Graham Pierce, The University of Aberdeen, United Kingdom and University of Aveiro, Portugal;
- Professor Paula Castro, CFE, University of Coimbra, Portugal;
- Dr. Hélder Muteia, Dr. Hélder Muteia/ Representante da FAO Portugal e da CPLP.

Cooperating Organisations

- United Nations Environment Programme (UNEP);
- World Health Organisation (WHO);
- World Meteorological Organisation (WMO);
- International Climate Change Information Programme (ICCIP);
- CGIAR Research Programme on Climate Change, Agriculture and Food Security.

PROFILE OF PARTICIPANTS

Delegates attending the "SYMPOSIUM ON CLIMATE CHANGE, AGRICULTURE, FISHERIES AND FOOD SECURITY IN AFRICA" will come from a cross-sectoral range of areas. These are:

- 1. Members of NGOs working with food security;
- 2. Researchers at universities and research centres;
- 3. Teaching staff at universities;
- 4. Representatives from companies;
- 5. Representatives from UN and national development and aid agencies working with climate change and food security and funding/ executing projects on the ground;
- 6. Members of social movements;
- 7. Project officers and consultants;
- 8. Other people interested in the topic.

It is believed that this wide range of participants will help to outline the need for and the usefulness of integrated approaches towards reducing the impacts of climate change on food security in African countries and hence contribute to the further consolidation of this thematic area.

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STRUCTURE OF THE EVENT

The "SYMPOSIUM ON CLIMATE CHANGE, AGRICULTURE, FISHERIES AND FOOD SECURITY IN AFRICA" will be organised in two main strands:

Strand 1: the displays

Individual participating and organisations will be able to put-up displays describing their works and projects and to distribute the relevant information to the participants. The displays will be the backbone of the event and will allow close, one-to-one contacts between the participants and the exhibitors.

Strand 2: the presentations

A set of presentations, divided into five main themes will be organised, distributed over parallel sessions dealing with some of the issues of strategic value in the field of climate change and food security. These are:

Session 1: Measuring and Reporting on the Impacts of Climate Change on Agriculture, Fisheries and Food Security;

Session 2: Indigenous Strategies to Cope with Climate Change and Enhance on Agriculture, Fisheries and Food Security;

Session 3: Fostering Agriculture and Food Security via Soil and Water Conservation Measures, Smart Land Use and Forest-Based Strategies and Programmes;

Session 4: Fostering Sustainable Fisheries via Conservation Strategies and Conservation Programmes;

Session 5: Information, Communication, Education and Training on Climate Change and on Agriculture, Fisheries and Food Security;

Session 6: Climate Change, Agriculture, Food Security, Fisheries and their interactions on Health;

Session 7: Climate Change Social and Economic Impacts;

Session 8: Coping with Climate Changes: Participation Processes, Citizenship, Plural Knowledge and Local Cultures.

The plenary and parallel sessions, as well as the social events, will provide participants with an outstanding opportunity to interact, network and learn about the latest ideas, projects and practices, hence supporting efforts to enhance agriculture, fisheries and food security in Africa.

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TIME-TABLE

The "SYMPOSIUM ON CLIMATE CHANGE, AGRICULTURE, FISHERIES AND FOOD SECURITY IN AFRICA" will be held on 24-25 October 2016 in Pemba, Mozambique. Pemba can be accessed by many international connections. The schedule is as follows:

Day 1 – 24 th October 2016	Day 2 – 25 th October 2016
Morning:	All day:
Plenary and Sessions	Exhibition and visit to displays
Exhibition and visit to displays	Morning:
Afternoon:	Plenary and Sessions
Plenary and Sessions	Afternoon:
Exhibition and visit to displays	Plenary and Sessions
Evening:	Conclusions with the hand over of the Awards
Reception	for the best papers

In order to ensure an efficient use of the time, delegates are kindly asked to organise their travel in a way that allows them to arrive in Pemba in the course of 23rd October 2016, and travel back on or after 26th October 2016, so they can fully take part in the Symposium.

DEADLINES

Deadline for submission of abstracts: 30th August 2016

Deadline for submission of papers: 30th September 2016

Deadline for the submission of revised papers: 30th November 2016

Deadline for registrations: 30th September 2016

Since the conference book is expected to be launched shortly after the event, the deadlines need to be followed.

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FEES AND CHARGES

A discounted fee of Euro 150 (for African professionals) or Euro 250 (for non-African professionals) or Euro 25 for students, plus 19% VAT, will be charged to those who register until 30th July 2016 (early bird registration). After that, delegates will need to pay the full fee of Euro 250, Euro 350 and Euro 50 respectively (plus 19% VAT). The fee includes warm buffet lunches and coffee breaks on day 1 and day 2, as well as dinner and on day 1. Furthermore, the fee includes a **on-line copy of the book "Integrating Mitigation and Adaptation Strategies to Enhance Agriculture, Fisheries and Food Security in the African Continent"**, to be made available to the participants.

Organisations or individuals not able to pay this fee should contact the Secretariat so that it may be reduced in special cases. Interested people and organisations are encouraged to register by completing the application form provided. **This is a self-funded event and the organisers are unable to pay any travel or accommodation costs** of any kind. They are however happy to issue letters of invitation to support delegates to request funding for their participation.

REGISTRATION AND CONDITIONS OF PARTICIPATION

Registrations are now open and are possible until the 30th September 2016. In order to prevent abuses, registration forms will be sent to potential delegates on an individual basis. Regrettably, logistical limitations mean that registrations after the deadline will not be possible. Since the space for displays and the time for presentations is limited, **delegates are advised to register as soon as possible.** The organisers will notify any interested delegate or organisation in case there are any limitations with time for presentations or space for displays. Registered delegates will then receive further details on the payment of the fees and updated information on the preparations for the event.

The Chairpersons, following consultation with the organising committee, will take the decision as to which papers will be accepted for presentation. Participants registering to the event will do so under the condition they will cover their own travel, accommodation and incidental costs (e.g. visa fees) related to their trip to Maputo.

This is a self-funded event and the organisers are unable to pay any travel or accommodation costs of any kind. Letters of invitation to enter Mozambique can only be sent to bona fide, registered delegates, who have paid their fees and need a document to show their employers. For cancellations of registrations up to 45 days before the event, a 50% refund may be made. For cancellations afterwards, no refunds will be possible. Registrations are now open and may be made on-line at: https://www.haw-hamburg.de/en/ftz-als/events/



CONTACT POINTS FOR SCIENTIFIC INPUTS AND COOPERATION

All questions related to scientific inputs and strategic partnerships, as well as the book, should be sent to:

Walter Leal (BSc, PhD, DSc, DPhil, DEd, DLitt, FSB, FRGS, FLS)

Professor of Environment and Technology

Hamburg University of Applied Sciences (Germany) and Manchester Metropolitan University (UK)

E-mail: info@iccip.net

CONFERENCE ADMINISTRATION AND CONTACT POINT FOR FURTHER DETAILS

All questions related to registrations should be sent to:

Professor Ulisses M Azeiteiro, CFE, University of Coimbra and Universidade Aberta (PT) <u>Ulisses.Azeiteiro@uab.pt</u> or Professor Fernando Morgado, University of Aveiro (PT) fmorgado@ua.pt.

All questions related to abstracts should be sent to:

Prof. Paula Castro, Centre for Functional Ecology, University of Coimbra, E-mail: pcastro@ci.uc.pt

All questions related to local arrangements and logistics in Mozambique should be sent to:

Serafino Mucova – General Secretariat, E-mail: events@fcn-unilurio.com

Ilda Reiser – Hotel Reservations, E-mail: events@fcn-unilurio.com

HOW TO SUBMIT AN ABSTRACT

An abstract should be up to 200 words, it should describe the rationale and aims of the paper, and some of its results. General descriptions of broad contexts should be avoided. The full contact details about the author(s) need to be provided. Abstracts should be written in the third person and not in the first or second one (e.g. I, me, or my paper). Please see in the next page a sample abstract. Authors, whose abstracts have been accepted, will receive further details about how to submit their full papers, and further logistical information.



SAMPLE ABSTRACT

(PLEASE SEND YOUR ABSTRACT EXACTLY WITH THE FORMAT BELOW TO):

Prof. Paula Castro, Centre for Functional Ecology, University of Coimbra, E-mail: pcastro@ci.uc.pt

Promoting Climate Change Adaptation in Developing Countries: breaking misconceptions and addressing information needs

Walter Leal (BSc, PhD, DSc, DPhil, DEd, DLitt, FSB, FRGS, FLS)

School of Science and the Environment

Manchester Metropolitan University

Chester Street

Manchester, M1 5GD

United Kingdom

E-mail: info@iccip.net

Abstract

The impacts of climate change to natural ecosystems, infra-structure and livelihood, means that the implementation of climate change adaptation strategies in developing countries has become a pressing issue. Among other factors, the undertaking of adaptation strategies is made difficult by the general lack of awareness and spread misconceptions about the real impacts of climate change which, in turn, slow down the execution of the adaptation initiatives needed, and which may ameliorate them.

This paper presents an analysis about the misconceptions related to the implementation of climate change adaptation strategies, and describes the most widespread ones, as well as their implications. A special emphasis is given to the problems and barriers caused by misinformation, which – in turn- prevent the promotion of adaptation initiatives at local level. Finally, some concrete steps which may be taken in order to break the misconceptions and foster a more systematic view of adaptation strategies, are outlined. Experiences gathered in this paper will be useful to people and organisations interested in the different levels of responses given to climate changes threats, and on some of the tools which may be used to encourage specific action to adapt to changing climate conditions.