



Permanent Interstate committee for Drought control in the Sahel

AGRHYMET Regional Centre

Second International Scientific Conference on Climate Change

1st to 3rd April 2020 in Niamey, Niger

**Theme : Vulnerability and adaptation of the agriculture sector
to climate change in the Sahel and West Africa**

Call for communication



Background

Sub-Saharan Africa, in general, and West Africa in particular, is considered as one of the most vulnerable regions to the effects of climate variability and change in the world. Indeed, extreme weather and climate events such as droughts, increased flood occurrence, shifting of the start and cessation dates of seasons, coastal erosion and land degradation are realities that negatively impact the livelihood of thousands of people in West Africa.

Climate change has a double impact on agriculture. First, a direct impact through the reduction of crop yields due to changes in temperature and rainfall, and then indirect impact due to effects on natural resources (vegetation, soils and water). For example, heavy rains and winds cause soil erosion and reduce carbon storage capacity, and the warming of the atmosphere results in a large increase in plant water requirements. Adaptation of agriculture, forestry and livestock breeding to climate change and mitigation of greenhouse gases (GHGs) are urgent, not only to ensure food security, but also to contribute to global efforts to reduce emissions. The Paris Agreement signed by 192 countries mandated the 2015 Conference of the Parties (COP21) to take concrete steps to reduce GHG emissions. Thus, global warming could be limited, and the negative effects on agriculture reduced, in order to reach the Millennium Development Goals (MDGs) adopted by the United Nations. Without adequate adaptation measures, most of the progress made in recent decades in development and poverty reduction would be undermined.

The development and promotion of adequate adaptation strategies for the sub region is therefore a priority. The many initiatives undertaken at the national, regional and international levels are often fragmented and take into account climate change adaptation to varying degrees in agro-sylvo-pastoral and fisheries production systems. The ongoing process for setting up the Regional Climate Center (RCC) for West Africa and the Sahel falls within this framework. In addition, three major climate commissions have been set up by the African Union Commission to boost climate investments in Africa. Among these commissions, of the one for the Sahel region chaired by the President of the Republic of Niger, which has just adopted an ambitious investment plan in the order of 400 billion US dollars for the 2018-2030 period.

In addition, the signatory countries of the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement committed themselves through their Nationally Determined Contributions (NDCs), with the “adaptation” component remaining a priority for Africa.

The priority needs to increase resilience in the region include: i) improving baseline data and scientific knowledge of climate to better guide adaptation strategies; (ii) the capitalization and scaling up of successful adaptation and mitigation experiences as well as the transfer of new technologies; (iii) capacity building in mobilizing funds to better seize the opportunities of climate finance.

In this context, the AGRHYMET Regional Center (ARC) is organizing the 2nd international scientific conference on climate change in the Sahel and West Africa, following the one held in Ouagadougou in Burkina Faso in 2007. This second conference will contribute to strengthening the technical and scientific bases of the region and the role of ARC as Regional Climate Center for West Africa and the Sahel

Objectives

This conference aims at sharing experiences on issues of vulnerability, adaptation strategies in the areas of agriculture, livestock breeding, forestry, water resources, fisheries, as well as issues of mitigation. More specifically, it will:

1. Review the achievements and needs of research and extension in the field of climate and its impacts on the agricultural sector
2. Create a framework for exchanges among the various actors in the field of climate and its impacts.

The expected results of the conference are the followings:

1. Advances in appropriate technologies, techniques and practices for adapting to climate change are listed;
2. Research and extension needs on vulnerability, adaptation and resilience are identified;
3. Scientific guidance is provided to climate change initiatives, projects and programs in the sub region for the benefit of the people;
4. The AGRHYMET Regional Center role of scientific and technical coordination in the field of climate and its impacts is strengthened;
5. A regional consultation framework on climate change and its impacts is put in place.

Themes of the call

Contributions should focus on variability, current trends and climate projections, impacts in different sectors, adaptation measures and climate finance. The main topics to be discussed will focus on the following:

1. **Data, tools and methods:** observations, data management and analysis, climate modeling;
2. **Risks, vulnerability and impacts:** vulnerability analysis approaches, climate risk assessment, impacts of climate risks on farming units;
3. **Adaptation of the agricultural sector to climate variability and change:** risk and disaster management, adaptation strategies (innovations, good practices, local knowledge valorization, adaptation with co-benefits in mitigation, etc.), sustainable development;
4. **Funding mechanisms and mitigation:** climate finance, carbon market, agricultural insurance, saving accounts and credit, integration of adaptation into planning, private sector, national climate funds, mitigation, etc. ;
5. **Advocacy and communication to policy makers.**

Each theme will be introduced by a keynote speech of a renowned expert in the field.

Types of application

Authors are invited to send abstracts (in French or English) not exceeding 300 words. Abstracts can be submitted online at the Conference website (<http://conferenceclimat2020.cilss.int/>) or by email to secretariat_conference_climat_2020.agrhymet@cilss.int, before **November 30, 2019**.

The abstract must be in Times New Roman font with a double space.

The font sizes are: Title (bold 14 points); Authors' names (12 points); Name of institution (italics 12 points); Content (12 points).

The first author must mention his/her e-mail address.

All abstracts received by **November 30, 2019** will be evaluated by a scientific committee. Authors of pre-selected submissions will be invited to submit their full papers by **February 28, 2020**. Accepted contributions will be presented either as a plenary presentation, or in parallel or poster sessions.

The proceedings of the conference will be submitted for an indexed publication

Deadlines :

Submission of abstracts : **30 November 2019**

Acceptance of abstracts : **15 January 2020**

Submission of the full document : **28 February 2020**

Registration : **28 February 2020**

Period of the conference : **1st to 3rd April 2020**

