



# AFRICONNECTIONS

**Transdisciplinary approaches to Development, Security and Innovation**

**I EDITION**

**24<sup>th</sup> – 28<sup>th</sup> June 2024, Pisa**

## **Learning objectives**

Africa has a central role to play in developing solutions to the global challenges of the next decades. While the African continent has experienced considerable economic and demographic growth, urbanization and development of digital technologies, on the other hand, challenges have emerged such as climate change, food insecurity, migration, disputed governance of resources, violent extremism, political instability and inequality.

The Seasonal School will introduce participants to a transdisciplinary approach, drawn from the fields of political science, international law, agriculture, political economy, management and health, that will provide integrated knowledge, methodologies and tools to answer the questions that will increasingly guide international research and practice on sustainable development issues in Africa.

## **Teaching methodologies**

Students will be exposed to an interactive learning environment: lectures, round tables and simulations will be used to promote the development of decision-making, communication, and leadership skills. Several International experts will participate, bringing their expertise and mentoring to the participants of the School.

## **Who should attend this Seasonal School**

Highly motivated undergraduate, postgraduate as well as PhD students from different backgrounds: law, political science, management and life sciences who are interested in understanding the current challenges of Africa, from development to security issues.



## **Day 1: Setting the stage**

**9:00 – 9:30 Introduction to the course (Mario Enrico Pè), Context and expectations.**

**9.30 – 10:30 Keynote Speech: Emanuela del Re**

**10:30 – 11:00: Coffee break**

**11.00 - 12.45: Roundtable: Mending the Europe-Africa relationship? The case of the Sahel - Jean-Hervé**

**Jezequiel, Yvan Guichaoua**

**12:45 – 14:00: Lunch Break**

**14:00 – 15:30: Development challenges in Africa – Kenneth Amaeshi**

**15:30 – 16:00: Coffee break**

**16.00-17.30: A brief history of African studies – Cristina Ercolessi**

**17.30-19.00: African beats: Imagining emancipation through music – Mattia Grandi**

**19:00: Welcoming reception - apéro**



## **Day 2: "International Perspectives: Politics, Development, Democracy, and Rule of Law"**

### **9:00-11:00 Africa in the international system (Francesco Strazzari)**

This session focuses on Africa in the international system, from the perspective of international relations and post-colonial theories, as well as Africa and democracy and political regimes. Topics include the role of Africa in global politics, its relations with major international actors, and the impact of colonialism and decolonization on African states and societies.

**11:00 – 11:15** Coffee break

### **11:15-13:15 Conflicts and security dynamics (Luca Raineri)**

This session will address the themes of conflict dynamics and civil wars, security and insurgency, and transnational security dynamics. Discussions encompass the root causes of conflicts in Africa, the role of state and non-state actors in perpetuating or resolving conflicts, and the implications of conflicts for regional and international security.

**13:15-14:15** Lunch Break

### **14:15-16:15 Elections in Africa: Applicable norms and recent practice (Andreas de Guttry)**

This session will be dedicated to an overview of the international and regional norms applicable to elections in Africa and to the tools to enforce them. Topics include the right to vote and to be elected, the role of electoral commissions, electoral observation missions, tools and mechanisms to enforce the relevant rules. All these topics will be analyzed in light of the recent trends and challenges related to elections occurring in the African continent.

**16:15 – 16:30** Coffee break

### **16:30-18:30 The contribution of the rule of law to peace and security in Africa (Lorenzo Gasbarri)**

This session will examine the crucial role of the rule of law in regional strategies aimed at post-conflict reconstruction and peacebuilding in Africa. Discussions will explore the efforts to strengthen legal institutions and promote accountability and justice in post-conflict settings, as well as the criticisms deriving from the application of Eurocentric legal concepts to the African systems.

**18:30-19:30** Q&A and general discussion



## **Day 3: Agricultural development in the context of climate change**

### **9:00 –11:00: The Climate Change Challenge (Roberto Buizza)**

In this lecture, the participants will be introduced to the Earth-system components that determine its climate, and to the role of man-made greenhouse emissions in causing the ongoing climate warming. The current state of the climate will be discussed, and future projections based on different emission scenarios will be discussed, with a particular focus on the African Continent.

**11:00 –11:15** Coffee break

### **11:15 - 13:15 Principles of economic development: climate change and income inequality in Africa (Elisa Palagi)**

This lesson will investigate to what extent climate change has already impacted the economy and what future scenarios imply for the socioeconomic system. The lesson will particularly analyze the impacts of global warming and extreme events on agriculture and income inequality, with a focus on the African context.

**13:15-14:15** Lunch Break

### **14.15-16.15 Agricultural development: principles of agroforestry and participatory management of agrobiodiversity in Africa (Paolo Bàrberi, Sara Burbi)**

This slot is organised in two parts. In Part 1, after an introduction on the relevance of agrobiodiversity management and agroforestry systems in the context of sub-Saharan Africa, some case studies from Mali, Madagascar and Ethiopia will be presented. These will serve the purpose of highlighting the importance of tackling this issue from a transdisciplinary perspective, and of igniting the second, interactive part. Part 2 will include an introduction to participatory approaches and methodologies that foster transdisciplinarity and community engagement, which are among the pillars of research grounded in agroecological principles. Initially, students will be given an overview of key concepts and applications of participatory work. This will be followed by a role playing exercise based on a case study. The class will be split into multiple groups; each group will need to address a question or a problem from the perspectives of several different actors involved in real-life contexts, from farmers to policy-makers, to researchers, middle-men, community leaders, consumers. After presenting the results from their group work, students will be given the opportunity to collectively reflect on the practical application of participatory methodologies, their benefits and potential challenges.

**16:15-16:30** Coffee break

### **16:30 - 18:30 The role breeding in the context of smallholder farming in Africa (Mario Enrico Pè, Leonardo Caproni, Martina Occelli)**

This lecture is organized in two sections that will discuss: i) the role of Genetics and breeding for XXI century agriculture with a focus on the utilization of genetic resources in plant breeding. In this section students will deal with the importance of breeding resilient crops in Africa by leveraging farmer's traditional knowledge into the design of innovations in agriculture. ii) In the second section of the lecture, students will explore how these innovations can translate into practical crop improvement in Africa through a wide range of interdisciplinary methodologies at the intersection between crop improvement and societal impacts. The discussion will build on successful stories led by national agricultural research programs in sub-Saharan Africa focusing on neglected/opportunity crops (cowpea, sorghum, pigeon pea) and how their breeding is shaped by – and shapes – farmers and their livelihoods.

**18:30-19:00** Q&A and general discussion



## **Day 4: Innovative initiatives for affordable energy and healthcare in Africa**

### **9:30 - 10:00 Challenge and opportunities for an affordable access to the energy in Africa (Eleonora Annunziata)**

This session will offer an overview of the current state of energy access in African countries, highlighting the challenges and opportunities for concrete achievements in addressing existing energy poverty.

### **10:00 -11:00 Analysis of Investments and projects in renewable energies in Africa (Eleonora Annunziata)**

This session will interactively present and discuss the most interesting renewable energy projects in Africa, with a specific focus on off-grid solutions and the relevant stakeholders involved."

### **11:00-11:15 Coffee break**

### **11:15-12:30 Case studies on projects for supporting the development of renewable energies in rural and remote areas of Africa: evidence from LEAP-RE project (Eleonora Annunziata, Fabio Iannone)**

This session will feature interactive presentation and discussion on the most promising case studies from the Horizon 2020 LEAP-RE project, focusing on the development of geothermal energy in rural and remote areas of Africa.

### **12:30-13:30 Lunch Break**

### **13:30-14:30 Introduction to performance measurement in health care in Africa (Maria Francesca Furmenti)**

This session will illustrate the system for evaluating the performance of health services in low- and middle-income countries, the collaborative approach for collecting and disseminating results, and for continuous system improvement.

### **14:30-15:30 Case studies on performance measurement: Uganda, Tanzania and Ethiopia (Maria Francesca Furmenti)**

During the session, hospital and community case studies from Ethiopia, Tanzania and Uganda will be presented.

### **15:30 – 15:45 Coffee break**

### **15:45-16:45 Medical simulation in Africa - A training course with Ethiopian nurses and midwives (Sabina Maglio)**

This session will familiarize attendees with the medical simulation field in Africa. It will explore the current methods of training clinicians, the challenges faced by the continent, and the potential for future advancements. The discussion will delve into these topics, utilizing the example of a training course for nurses and midwives organized by SSSA in partnership with St. Luke Hospital in Wolisso, Ethiopia.

### **16:45-18:00 Hands-on activities with high-fidelity simulators of the BioRobotics Institute (Sabina Maglio)**

During this session the participants will be asked to get involved with high-fidelity simulators developed by the BioRobotics Institute of SSSA. Attendees will be able to experience firsthand what is intended and expected of a high-fidelity simulator and will be able to try to put themselves in the shoes of physicians.



## **Day 5: Transdisciplinary Synthesis and Final Examination**

**Francesca Capone, Valentina D'Amico**

### **9:00-10:00 Introduction on methodological tools and challenges to carry out research in Africa**

1 hour session split into two sub-sessions with an introduction on the tools followed by an overview of the challenges stemming from their implementation

**10:00-10:15:** Coffee break

### **10:15-11:15 How to carry out interviews**

focusing on some of the topics addressed in Day 2 + second half of Day 4). Two scenarios will be prepared to carry out interviews on two different topics (for Day 2 the first topic could be the role of the International Criminal Court in Africa and a simulation on how to collect information from potential victims of international crimes).

### **11:15-12:15: Focus Group Discussions (FGDs).**

How to Conduct Focus Group Discussions in Subsistence Contexts: challenges and opportunities in gathering Information within group dynamics (focusing on some of the topics addressed in Day 3). A scenario will be developed to conduct a Focus Group Discussion (FGD) focusing on farmers' decision-making process. The topic could include farmers' preferences regarding variety attributes, with the aim of guiding research activities and policies related to breeding.

**12:15-13:15 Multi-actor platform** (focus on the first part of Day 4 and in particular on Innovation and Governance). The simulation will be designed to highlight the critical role of governance and the active participation of local actors and institutions in achieving the 'last mile'—ensuring effective benefits for the intended beneficiaries—in research and development programs. In this activity, students will engage in a simulated multi-actor platform meeting, with each participant assuming the role of a key actor, such as a representative within a specific value chain. This dynamic exercise aims to provide a hands-on understanding of the complexities and interactions involved in fostering successful outcomes at the grassroots level.

**13:15-14:00:** Lunch break

**14:00-15:00: Restitution and feedback from the participants**

**15:00-15:15:** Coffee break

**15:15-17:00: Final exam**