



### LEAP AGRI

A Long term EU-Africa research and innovation Partnership on food and nutrition security and sustainable Agriculture

#### **About**

The LEAP-Agri programme (2016-2022) is an African Union-European Union partnership aimed at research and innovation for food and nutrition security and sustainable agriculture. This long-term, jointly funded Research & Innovation (R&I) Partnership was built on the roadmap of the AU-EU High Level Policy Dialogue on Science, Technology and Innovation (HLPD). The consortium exists out 19 partners from Europe, 10 partners from Africa and one international organisation.

# Aim and objectives

The aim was to contribute to the United Nations Agenda 2030 and the Sustainable Development Goals on the priority topic of 'Food and Nutrition Security and Sustainable Agriculture' (FNSSA). In this frame, 27 research and innovation (R&I) projects were funded with participants from the two continents. LEAP-Agri demonstrated that the capability of 24 funding bodies from 18 EU and AU countries to commit national budget for FNSSA R&I research in addition to EC top up funds.

A complementary aim of LEAP-Agri was to propose a flagship programme in the light of this cofounded call experience.

## Challenges

Africa and Europe share global challenges to improve food systems on sustainable development pathways in line with the targets of the SDGs and more specifically SDG2 sustainable development goal "Zero hunger". The first of these challenges is to end hunger and ensure access to safe and sufficient food for all, especially people in vulnerable situations including children throughout the year. According to the World Food Programme, 135 million people suffer from acute hunger largely due to man-made conflicts, climate change and economic downturns and more than 800 million suffer from malnutrition.

A profound change in the global food and agriculture system is needed if we are to feed the 690 million people who suffer from hunger today and the additional 2 billion people the world will have by 2050. Increasing agricultural productivity capacities and strengthening sustainable food production systems are necessary to help reduce the problem of hunger, including agricultural products and food waste decrease. At the same time, it is needed to implement resilient agricultural practices that increase productivity and production, contribute to the preservation of ecosystems, strengthen the capacity to adapt to climate change, extreme weather events, drought, floods and other disasters, and progressively improve land and soil quality, conserve water resources and biodiversity.

It is challenging to ensure the proper functioning of food and derivatives markets and to facilitate rapid access to market information, including food reserves, in order to help limit extreme food price volatility. Moreover, it is important to prevent trade restrictions and distortions in global agricultural markets.

In this context, Africa and Europe have decided to increase investment in rural infrastructure, agricultural research and extension services and the development of new technologies to strengthen their agricultural productive capacities while protecting the environment, managing renewable



resources, decreasing waste and providing healthy food for their people. The two continents are seeking to improve trade to ensure a supply of essential foodstuffs for each other even when they cannot be produced locally (e.g. tea, coffee, cocoa for Europe, wheat, durum wheat in tropical Africa).

Sustainable food systems' transformation needs to build on the right to food and scaling of a systems approach. For evidence-based decision-making, investment into research and innovation plays a critical role. However, for it to be effective, research needs to be actor-oriented and despite the problems being of concern to both continents, solutions need to be context-specific and co-developed, including multiple stakeholder groups. To reach these goals, research programming, implementation capacities and knowledge management and communication mechanisms need to be strengthened across the AU-EU region through the development of a joint AU-EU R&I agenda on FNSSA. Moreover, understanding funding constraints and adjusting current funding mechanisms to facilitate equal partnership development is a crucial step towards consolidating the long-term AU-EU Partnership and the HLPD.

## Scope, goals and research topics

Four priority areas were identified in the roadmap of the HLPD, as being of common interest for Europe and for Africa. LEAP-Agri built on these four priorities for its first co-funded call and these areas remain a priority over the coming years, and should be illustrated but not restricted to the following topics:

- Sustainable intensification,
  - The improvement of the production of food/fibre/biomass and of services (social, economic and environmental);
  - Reduction of the environmental impact of such production and the depletion of natural resources;
  - o Ecological intensification approaches;
  - o Breeding of crops and animals;
  - o Nutrient management.
- Agriculture and food systems for nutrition,
  - The reduction of food waste;
  - o Improvement of diets (including through development of aquaculture and coastal fisheries);
  - Solving under-nutrition, obesity and micronutrient deficiency;
  - o The role on diets of urban agriculture and better rural-urban linkages;
  - o Understanding of consumer behaviour in relation to diets; and
  - o Role of regulations, education and incentives.
  - o Pest and disease control;
- Expansion and improvement of agricultural markets and trade,
  - o Local and global value chains and markets;
  - o Linking smallholder farmers/fishers & rural communities to markets;
  - Impact of urbanisation;
  - IT and communication technologies;
  - o Price stability;
  - Market logistics;
  - o Innovative and multiscale approaches to global food system policies;
  - o Organisational innovations;



- o Facilitating uptake of innovations across farms and rural communities;
- Cross cutting approaches for FNSSA.

LEAP-Agri highlighted in its 'Development of a medium to long-term joint research and innovation agenda (2020)' new cross-cutting R&I topics in addition to the HLPD roadmap on FNSSA:

- Climate resilient agriculture, and
- Global issues of antimicrobial resistance.

LEAP-Agri proposed a new flagship programme on FNSSA in the light of the co-funded call experience. It is published in the 'Draft proposal for a long-term EU-Africa Research and Innovation Flagship Programme on FNSSA (2022)'. Agroecology is identified as main topic for EU-AU research and innovation. The document also proposed ways for improving and maintaining the AU-EU collaboration for FNSSA R&I.

LEAP-AGRI highlighted during their final conference in Senegal (2022) the importance of funding projects following consolidation of results: It is essential that there are dedicated calls or part of the calls targeted to projects following promising projects. This will allow for a perpetuation of achievements or a transfer of achievements.

