





# Strengthening Capacity for Participatory Management of Indigenous Livestock to Foster Agricultural Innovation in Eastern, Southern and Western Africa (iLINOVA)



#### **Consortium**

#### Implementing partners:

- Egerton University (Project Coordinator)
- · Lilongwe University of Agriculture and Natural Resources (LUANAR), Malawi
- Obafemi Awolowo University (OAU), Nigeria



#### Budget

Total budget: €1,234,546.74 EU contribution: €999,736.74



#### **Duration**

January 2014 - June 2017



#### **Countries of intervention**



- Kenya
- Malawi
- Nigeria



# **Development challenge**

Food security and poverty remain the major challenges in Kenya, Malawi and Nigeria. Indigenous Livestock (IL) contributes significantly to the agricultural sector in these countries, between 12-15% of GDP and to the livelihoods of poor rural people.

The majority of indigenous livestock in Kenya, Malawi, and Nigeria is kept under low input systems as policies governing the management of indigenous livestock are not founded on scientific evidence. Additionally, the limited emphasis of academic programmes on science, technology, and innovation has led to young scientists lacking the qualifications and skills needed to promote innovation and develop appropriate technologies for indigenous livestock.

Also, the lack of awareness of the available technologies by small farmers and rural households would enhance the livestock value chain, food, nutrition and secure income.



# **Project approach**

The iLINOVA project applies an inter-disciplinary and participatory approach, as the sustainable use, development and conservation of Indigenous Livestock require the support of farmers, pastoralists and breeders, local and indigenous communities, research organisations, public institutions, the private sector, and the civil society.

This combined approach provides efficient IL management and enhanced competitiveness. Together with Poverty reduction, food and nutrition security, growth, and socioeconomic development of stakeholders involved in indigenous livestock management (chicken, cattle, goats, rabbits, pigs, etc.) in Eastern, Southern, and Western Africa.

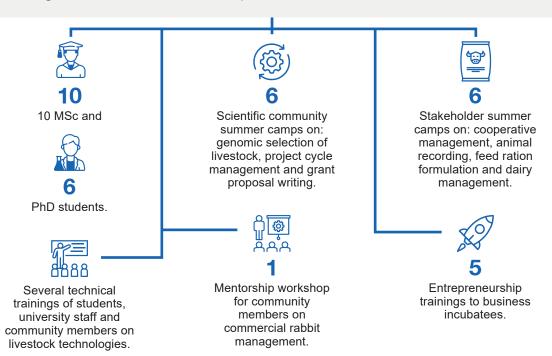
The iLINOVA project design was also aligned with the Global Plan of Action for Animal Genetic Resources (GPA) framework of the Food and Agriculture Organisation of the United Nations (FAO).



# **Project results**

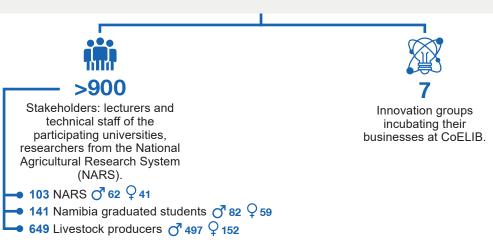


Improved knowledge and capacity of students, scientist, entrepreneurs, farmers and rural communities on Indigenous Livestock technologies, IL management and enhanced competitiveness.





Improved capacity building of the Stakeholders Involved:





25 Research papers published between 2016 - 2018.



A memorandum of understanding with the African Agribusiness Incubation Network enables CoELIB to be one of the region's incubation centres.



# **Project results (2)**



The iLINOVA project generated the following outputs that built the achievement of the objectives and impact, facilitating technology transfer and networking.



Several audio and video programmes on livestock technology are available on YouTube (CoELIB-Egerton).



A system of mobile applications that connects researchers, farmers, input providers, and the market.



A protocol for the use of rabbit artificial vaginas (OLIRAV).



Poultry unit renovated at OAU.



2

Branches of CoELIB at LUANAR and OAU.



The establishment of the Livestock Innovation and Business Centre (ILBCentre)Centre of Excellence for Livestock Innovation and Business, CoELIB (www.coelib.org).



3

Technical liaison desks in the participating universities.



Technical liaison desks were set up to facilitate and institutionalise university-industry-civil society links.





Roundtable training sessions to foster university-industry-civil society links through partnerships and collaborations.



Improved knowledge and capacity of business from the following start-ups on ILT.

**M-FUGO**, a SMS-based marketing and information system for the different actors in the Indigenous Chicken Production Value Chain.

**Token**, an online platform linking farmers to research organisations.

Ukulima Frontline, a platform providing timely, relevant and reliable agricultural information by different actors along the agricultural value chain.

Prima Gallus, a 3-point business model focusing on value addition in chicken products, and also a mentorship programme targeting young entrepreneurs.

Mazao Miller, a producer of quality animal feeds such as layers mash, growers mash, chick mash and dairy meal among others for domesticated animals.



The iLINOVA project generated an important impact on the scientific staff and students from the participating partners and stakeholders, as well as enterprises (smallholder farmers, processors, traders, cooperatives, extension services) policy makers and CSOs in Kenya, Malawi and Nigeria that adopted scientific technologies as well as product value addition such as yoghurt making, such as pastured poultry farming, artificial insemination of chickens, rabbits, effective livestock management like animal recording, selective breeding, hydroponic pasture farming and improved feed formulation techniques:

- The project also connected the stakeholders with the local market.
- The participating universities benefited from industry links, mentorship, and internship have been incorporated into their curricula.
- Producers' innovative ideas, such as the Maggot House, which rears maggots to be used as alternative protein sources during feed formulation.
- A memorandum of understanding with the African Agribusiness Incubation Network enables CoELIB to be one of the region's incubation centres.

## €1.3 million

in funding from the
Netherlands Initiative for
Capacity Development in
Higher Education
(NUFFIC) to build the
capacity to deliver
competent graduates in the
dairy value chain.

#### \$800,000

in funding from United
States Department of
Agriculture (USDA) and
United States Agency for
International Development
(USAID) to support a
trilateral partnership for food
security involving Kenya,
USA and India.

#### €1 million

in funding from the

European Union through
the African Union
Commission to improve
indigenous chicken
productivity for enhanced
livelihood and food security
in Kenya and Malawi.

## \$40,000

in funding from **USDA** to enhance sustainable genetic improvement via Simplified Artificial Insemination for Sheep and Goat Producers.

# Sustained Impact

The sustained impact of iLINOVA project is linked to the re-establishment of CoELIB Centre on 2016 has been catalysing the development of new projects, collaborations and successful funding outcomes.

#### €3.5 million

in funding from the **Dutch Embassy** in Kenya to implement a project on Resilient, Robust and Reliable – from Aid to Trade (3R) to inform policy implementation in the dairy, aquaculture and horticulture sectors.

#### €1.3 million

in funding from **NUFFIC** to strengthen teacher training programmes to improve the delivery of Technical and Vocational Training and Education in the livestock sector of Kenya.

# \$3 million

in funding from the International Fund for Agricultural Development (IFAD) to boost rural youth employment opportunities through integrated agribusiness hubs in Cameroon and Kenya.

# \$500,000

in funding from USDA to develop to enhance the existing publication 'Methods of Livestock Research on Smallholder Farms' and increase its usage as an educational textbook for undergraduate and graduate instruction emphasizing livestock research 'on-farm' and 'on-station' in Kenya and abroad.

#### €1.3 million

in funding from **NUFFIC**to build the capacity for strengthening the
Livestock Value Chain and ensure CoELIB builds on existing capacity and fosters innovation and business-oriented actions.

# \$6 million

in funding from World

Bank to develop Centre of
Excellence for Sustainable
Agriculture and
Agribusiness
Management
(CESAAM).

#### \$1 million

in funding from **DigiFarm Kenya Limited** (a subsidiary of Safaricom PLC) to offer digital agricultural extension services to smallholder farmers in Kenya.

#### €1.3 million

in funding from **NUFFIC** to strengthen
food security and
agri-education in
South Sudan.



Sustained Impact (2)

## €3.2 million

in funding from **AU-NEPAD** within the Skills Initiative for Africa programme to building capacity to deliver skills programmes for the agricultural value chain (AGSKILLS).

#### €500,000

in funding from **Regieorgaan SIA** to contribute to structural reduction of post-harvest and food losses and food quality improvement in the dairy value chains.

#### \$15 million

in funding from **USAID** to empower the youth through increasing their economic prospects, strengthening higher education institutions, and enhancing youth serving systems.

## € 800,000

in funding from **NUFFIC** to strengthen
skills and training
capacity in the
horticulture sector in
Kenya.



# **Key lessons learned and best practices**

