

Objectives of the project

The objective is to promote inclusive, sustainable and climate-relevant transformation of the Eritrean dairy value chain to enhance food and nutrition security, reduce poverty, create job opportunities for young people, and promote resilience to climate change while mitigating greenhouse gas emissions.

Background

The livelihoods of close to 70% of the population are based on subsistence agriculture, which accounts for less than 20% of Eritrea's gross domestic product (GDP) and 20-30% of its commodity exports. The performance of the agricultural sector is hampered by over-reliance on traditional farming practices; environmental degradation, including climate change with



insufficient and irregular rainfall. These constraints lead to low levels of agricultural production and productivity.

The sector is further weakened by underdeveloped value chains, including the dairy value chain, which suffers from weaknesses in input supply, market access, a weak processing sector and low value addition. Over 50% of the total milk produced is sold informally in the local market and less than 20,000 litres is processed daily by five processing plants. Seasonality of demand linked to the two big fasting seasons in Eritrea is a major problem for both farmers and processors. To date, agri-food research and innovation systems have failed to impact in a significant way on the lives and livelihoods of smallholder farmers. This is due to problems such as inadequate public policies and government investments to create a favourable innovation climate in agriculture. As a result, major research gaps exist all along the dairy value chain from production to processing.

The theory of change to achieve the objectives

The theory of change is that focusing on the entire dairy value chain in the three study zones in Eritrea and empowering all of the relevant actors through capacity building and enabling greater access to, and capacity to use new knowledge/technologies. This will result in the following project impacts: improved dairy production and productivity; enhanced market orientation of producers; more and better quality dairy products; enhanced income; new employment opportunities for young people; improved organisational capacity in the State support sector; and greater enterprise skills and capacity to adopt new technologies among private sector value chain actors.

To achieve its objectives, the project will create a partnership between a consortium of European (Irish and Finnish) specialized organizations, international research institutes and the Eritrean counterparts. Ultimately, the project aims at creating a sustainable network and transfer of knowledge and experiences among the partners. The project will also work with local administrations, farmer dairy cooperatives and associations, service providers and local civil society organizations.

To improve climate smart dairy farming production, the needs of the project target groups will be addressed by providing a strong pipeline of contextually relevant new knowledge and technologies (such as artificial insemination, forage production and conservation, animal health and food technologies). These technologies will be based on scientific knowledge complemented by existing local knowledge. They will be tested, made available and applied on farm and throughout the value chain to accelerate agricultural growth and develop a strong and equitable dairy value chain. Integral to achieving the outcomes and outputs will be to ensure that activities are gender-balanced and institutionally and environmentally sustainable.





These activities will be complemented by others addressing the education and training needs of the extension services, research institutions, farmers, and entrepreneurs to enhance service delivery and organizational and entrepreneurial skills, as well as to produce the requisite human and institutional capacities for a more productive, competitive, and sustainable agriculture (climate smart innovation). The project aims to improve the research and development capacity of key national institutions, mainly within the Ministry of Agriculture managing the extension system research, as well as higher education, as they have a key role to play in support of the agri-food industry. These institutions will acquire the capacity to provide information and technical support to the dairy value chain in the short term and to provide information to guide national policy and development in the longer term. For this purpose they also need to be properly strengthened and equipped in terms of curriculum, laboratories and farm facilities.

The project intervention logic will support the scaling-out of the effective interventions within and beyond the selected regions' and dairy value chains. For that purpose a selection of activities will be developed to facilitate the promotion of principles and good practices for the development of dairy value chains: organization of project visits, participation in learning platforms, participation in policy taskforces and professional association events, organization of conferences and workshops, use of mass media and internet-based tools to disseminate results, and publications for the academic world

The project may face and consequently has to manage several risks. The key risks factors on the effectiveness of the project management are: reluctance in facilitating productive partnerships with agencies with proven records of success in value chain development; constraints in ensuring full and effective participation by all relevant State agencies; constraints in ensuring active participation by the private sector actors in the value chain; natural disasters; and inadequate physical infrastructure.

Activities

The main activities are the following:

- ✓ Dairy value chains mapping;
- ✓ Technical experimentation on dairy technologies in research facilities;
- ✓ On-farm experimentations on dairy breeds improvement, new animal facilities and research services through the identification of facilitators to champion the development of the technology;
- ✓ Provision of inputs to farmers along the dairy value chain;
- ✓ Support to dairy cooperatives and associations for milk collection, processing and marketing;
- ✓ Organization of technical trainings for dairy farmers and associations on dairy climate smart technologies;
- ✓ Management of a small "Job Creation Seed Fund" for young entrepreneurs;
- ✓ Institutional capacity building targeting the national research institute, the college of agriculture, MoA extension departments;
- ✓ Technical assistance and support provided by the international partners;
- ✓ Organization of exchange visits and study tours
- ✓ Support to MSc students and scholarships
- ✓ Up-grade of curricula at the agricultural college;
- ✓ Promotion and dissemination of dairy value chain principles and good practices (conferences, workshops, mass media, publications, internet & promotional materials).

Organization

The project is structured in six inter-related work packages (WPs): Design, implementation, management & coordination (WP1); project implementation plan (WP2); improved climate smart dairy farming productivity and supply of quality dairy products (WP3); enhanced organisational





capacity and enterprise skills of value chain actors (WP 4); enhanced service delivery and support of institutional actors (WP 5); increased access to information and knowledge on CSA practices to the wider public (WP 6).



Teagasc coordinates the overall project assisted by a national implementation team, to oversee all aspects of the implementation. This national team is supporting three regional teams, one in each host region. At a higher level, a National Steering Committee (NSC), chaired by the Ministry of Agriculture, assists the project management team to address strategic issues, to provide an overview of the project and to address coordination issues. Implementation is further supported by a National Project Implementation Committee (NPIC) which oversees the operations of the project and ensures that it meets all milestones. At the regional level, the project is guided by three Regional Project Implementation Committees (RPIC).

Implementing organizations

The Irish Agriculture and Food Development Authority - TEAGASC (Ireland)

Partners of the project

Natural Resources Institute of Finland (LUKE) (Finland), University College Dublin (UCD), University College Cork (UCC), Vita and SHA (two Irish NGOs).

Other main stakeholders

Eritrean Ministry of Agriculture (MoA); National Agriculture Research Institute (NARI); Extension Service; Regional/Zoba administrations; Hamelmalo Agricultural College (HAC); National Union of Eritrean Women (NUEW); ILRI (Ethiopian branch)

Other stakeholders involved will be: livestock farmers; private and cooperative input and output market agents and service suppliers, including milk collection and processing entities, as well as artificial insemination services and veterinary services; small scale entrepreneurs.

Region

Eritrea/ Debub, Maekel and Anseba Regions

Funding and co-funding





EU	€ 4,000,000
Co-funding from the implementing partners	€ 248,057
Total budget	€ 4,248,057

Duration

52 months (2020-2024)



