



***Establishing an Eco-dairy Training Centre at
Hamelmalo Agricultural College
(The State of Eritrea/FAO project TCP/ERI/3401)***



In good rainfall years about 60 percent of Eritrea's food needs are met by domestic production; in bad years about one third. Agriculture is the backbone of the economy driving growth in other sectors. Over eighty percent of households own livestock, which are extremely important for food security and livelihoods, and for providing draught power for ploughing and transport. In many areas there is increasing competition between livestock raising and crop farming. This has led the Government to focus on policies that promote integrated farming and food value chains under the *warsai ykalo* (self-reliance) programme.

Milk and traditional dairy products used to make a significant contribution to the diet of Eritreans. During former (colonial) times, annual per capita consumption is reported to have reached more than 30 kg with significant exports to the Middle East. Today the Ministry of Agriculture estimates consumption at just 10-12 kg. Milk and dairy products are currently in very short supply with demand hugely outstripping supply, resulting in prices beyond the reach of many households. The overarching constraint is lack of modern, appropriate technologies and up-to-date technical know-how and skills along the entire farmer to consumer dairy industry food chain; including the optimal and resilient use of locally renewable resources.



The project purpose (outcome) is thus *to have established at Hamelmalo Agricultural College a vocational agro-ecological Dairy Training Centre that provides practical training for degree and diploma students, farmers and other actors involved in the farm to consumer dairy industry value chain for improved dairy productivity and quality.* In so-doing the project will pilot an energy-efficient dairy-fish-crops/fruit/vegetable farming system whereby farm manure nutrients will be recycled: (i) first to produce bio-gas to fuel a 25 kva dual-fuel generator to power the farm and training centre; (ii) second to fertilise/feed fish ponds; and (iii) third to fertilise the college's demonstration and research plots and student gardens for growing cereals, green forage (for dairy animals), fruit and vegetables. The project will stimulate and promote the adoption of integrated, ecologically sound food and

agriculture best practice for affordable and sustainable food and feed production for scaling out to other parts of Eritrea. A nutrition component will pilot a school milk scheme for 870 primary school children in nearby Hamelmalo village.

Under its Technical Cooperation Programme the Food and Agriculture Organisation (FAO) of the UN will provide technical assistance, modern demonstration equipment and training to set up and operationalise the eco-dairy training centre on a sustainable footing. Stakeholders representing all public and private dairy industry interest groups endorsed the project at a validation workshop held in Asmara in 2011. Feedback from delegates is incorporated into the project; in particular aspects related to optimising the use of crop residues for animal feeding, the pilot school milk nutrition scheme and the pilot dairy-fish-crops/fruit/vegetable farming system. As well as providing practicals for students, the eco-dairy training centre will also run outreach courses for farmers and the dairy value chain community at large. The FAO project complements an African Development Fund loan of some USD4 million, managed by the Eritrean Higher Education Board, to finance the construction of new campus teaching facilities expected to be ready in 2014.



Hamelmalo milk for health & wealth: healthy consumers - wealthy farmers!

Project Summary

Duration

Two years (July. 2012 to June 2014)

Budget

FAO/UN	USD 489,000
Ministry of Agriculture	in kind
Hamelmallo Agricultural College	in kind



Impact

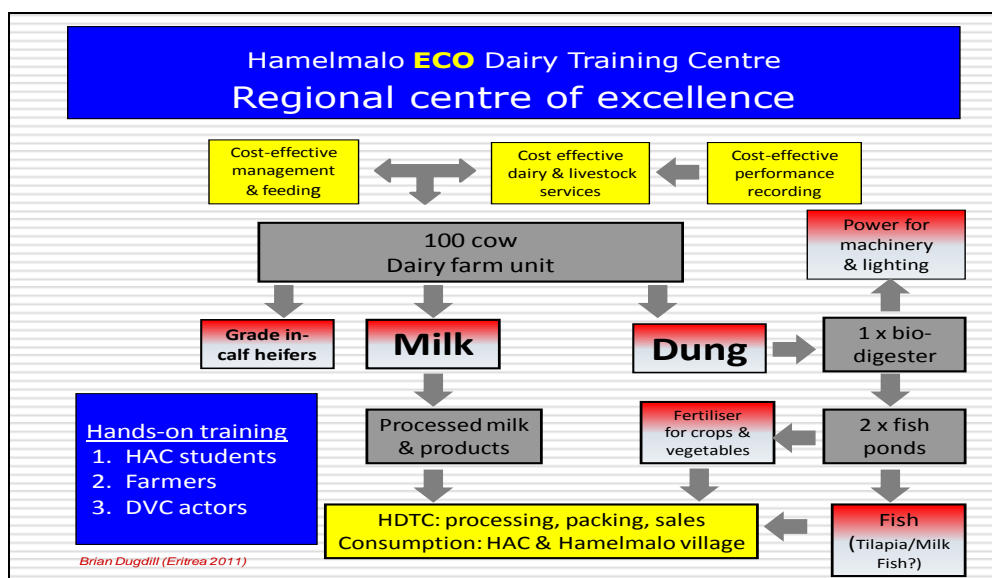
The project will contribute to improved livelihoods for livestock keepers in Eritrea through training in modern technologies and skills for sustainable increased milk production and, in so-doing, build capacity to:

- move milk and dairy products safely and affordably to rural and urban consumers;
- improve needy household food security and balanced nutrition;
- reduce the incidence of rural poverty and sustainably increase farming family incomes;
- enhance development and job opportunities for women and youth;
- safeguard the environment by promoting integrated farming using renewable resources.

Outputs

1. Detailed Zoba Anseba dairy situation and needs assessment technical report.
2. HAC dairy training farm intensified to demonstrate environmentally sustainable and profitable milk production.
3. A dairy training centre established for the safe processing and distribution of milk and dairy products.
4. Six tailored dairy training modules developed, tested and introduced for short-course residential and outreach training.
5. Sutor Community Dairy Association (CDA) reinforced as an efficient and profitable smallholder dairying model for providing safe and affordable milk and dairy products to consumers in Keren town.
6. Evidence-based learnings from project interventions used to sustain HDTC and multiply the integrated agro-ecological dairy-fish-crop/fruit/vegetable farming system and after the project.

* Source: TCP/ERI/3401 Project Document



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