FACT SHEET

Project: Up-scaling of pro-poor innovative dairy goat technologies for improved livelihood security and human capacity in selected highland areas

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Project description
The introduction of dairy goats has been accepted by small-holder farmers as a way of increasing income through the sale of milk, live animal sales and sale of manure, as well as food security. Results from the previous PANTIL-project in Mgeta division, Mvomero district, clearly indicated that the introduction of dairy goats contributed to increased household income and reduced vulnerability (Krogh et al., 2007). Five farmers started the project with 10 goats in 1988. On estimate, there were more than 400 dairy goat keepers and >1,500 Norwegian dairy goats in the area in 2011.

Dairy goats are gaining popularity in Tanzania and in Mgeta they are now being integrated with the production of Cashmere goats for fibre. In the new project areas such as Kibungo Juu, the use of goat manure for gardening and conservation agriculture, as well as selling for additional income, are emphasized. The Mgeta population is the only source of Norwegian dairy goats in Tanzania and the cropping rate is high, leading to fast generation turnover. This necessitates frequent replacement of bucks, a process which is still difficult for farmers to handle (Kifaro et al., 2007).

In this up-scaling project (2011 – 2014), performance of dairy goats (growth, reproduction, milk yield and composition among traits) in Mgeta is being evaluated. Information collected will be analyzed and used to improve genetic worthiness of dairy goats and the use of artificial insemination is encouraged. In new areas training in and introduction of these goats is being done.

Description of the research
Registration of goats by ear tags and recording cards started in August 2011 and is on-going. In the present project, performance traits are recorded. From these records performance of goats and the development of the project can be evaluated, monitored, and decisions can be made. Traits being recorded include does milk yield, kids birth weights and monthly weights, birth types, growth of kids, health and diseases and manure production and use among others. In addition, we are strengthening farmers associations, promoting the use of multi-purpose tree as animal feeding alternative and also
we are following the quality of goat milk and monitoring the goat milk value chain. Milk samples have been collected and analyzed.

**Expected outputs**

The project has five strategic objectives from which outputs are expected.

1. To up- and out-scale dairy goat keeping technologies;
2. To establish a value-chain for selling milk and milk products, especially yoghurt in Mvomero and Morogoro districts;
3. To up-scale Cashmere goat production and establish a value-chain for designer cashmere products;
4. To promote climate change adapted conservation agriculture involving dairy goats, multipurpose trees and manure for compost or direct application;
5. To establish a health monitoring and control programme for dairy goats.

It is expected that, number of both dairy goats and dairy goat keepers will increase at the end of three years. Our M. Sc. student is studying the dairy goat value chain and a report is expected by the end 2013. We also expect to increase the number of Cashmere goats for fibre, milk and manure whereas the use of manure and multi-purpose trees will increase significantly. It is the project goal’s to have the disease follow-up and control programme in place.

**Preliminary results**

We have entered a new area in Morogoro district and introduced 25 goats to farmers in Kibungo Juu ward east of the Uluguru Mountains. Prior to introduction of goats, farmers were trained on the management, husbandry and breeding of dairy. Same training was also conducted to dairy goat keepers who are not in the project.

In a baseline survey conducted in February 2011, it was discovered that:

- Both goat- and dairy goat keepers are increasing;
- There is more milk during the dry season than during wet season;
- Daily household milk consumption averaged 1.4, 1.2 and 0.5 litres in Tchenzema, Nyandira and Kibungo Juu, respectively;
- Respective milk sales were 2.0, 1.2 and 0.0 litres per household during the survey;
- Milk was being sold either to neighbours at an average price of 960 Tanzania shillings or at the collection centre at 875 Tanzania shillings per litre;
- Breeding of goats was mainly done through natural mating; however, through project initiatives farmers at times have practiced artificial insemination to improve their goats and generate replacement bucks;
- Diarrhoea was the major disease contributing to overall mortality of 13.5% in does and 29.8% in kids in 2011;
- 239 (20L tins) of manure were collected from 308 goats and 82% of the respondents used manure on various farm produce including vegetables, maize and potatoes. Vegetable was the leading crop that is manured (32.5%) by the farmers.
- Twining rate is increasing as a result of proper feeding and management during mating and gestation.


**Recommendations**  
We recommend the use of records to improve dairy goats productivity in the projects sites and elsewhere.

**References**  


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3 September 2013.