

Series 1 – Economic Pillar: Agriculture and Livestock

Dairy Goat Sector Enhancement Strategies for Sustainable Livestock Farming Communities

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Key Messages

Institutional linkages and collaborations are key strategies for enhancing the sustainability of dairy goat projects

Continuous farmer capacity building and establishment of sustainable community structures are necessary.

Dairy goat production technology requires special infrastructure within farming communities requiring the intervention of the government and development partners.

Enhanced value chain structures, effective market systems are drivers for improved farmer incomes and livelihoods.

Context

Livestock production remains a critical sector in the agricultural economy of developing countries. Among the livestock production systems, dairy goat production has increasingly gained popularity as a significant contributor to this important sector. Innovation and adoption of new technologies such as the promotion of dairy goat production, improvement of indigenous goats for better production are poised to make an even bigger contribution. This is in particular to the Kenya Big Four Agenda focused to eradicate extreme poverty and hunger, promote gender equality, ensure universal health care for citizens, habitable housing as well as tackling climate change by 2030.

Dairy goat farming has several benefits such as enhanced nutrition from the consumption of milk (Peacock, 2008), the creation of jobs through provision of animal health, breeding, and improved household income from the sales (Peacock and Hastings, 2011), provision of manure, and the vital role in cementing social relationships. Chenyambuga and Lekule (2014) assert that social-economic usefulness of dairy goats cannot be underestimated. Therefore, a profound concern on the sustainability of dairy goat farming is critical. In Kenya, the common

dairy goat breeds include Saanen, Toggenburg and Alpines, and their crosses with Saanen breed leading in the milk production.

In the 1990s and early 2000 goat milk consumption accounted for a small but growing percentage of the Kenyan dairy market. FAO (2011) estimates that over 70 per cent of the milk sold in Kenya originates from dairy cows with only 0.02 per cent from dairy goats. Unlike dairy cow milk where markets are organized, producers of goat milk are left to look for local buyers. In recent years, dairy goat farming in Kenya has doubled following an increased interest in the venture by many farmers in the country. This is because consumers have come to prefer goats' milk to that of other livestock due to its nutritious and easy to digest qualities. According to statistics from the Ministry of Agriculture, the total goat population in the country was 15 million in 2018, of which 400 thousand were dairy goats. This was an increase from 13 million of which about 200 thousand were dairy goats (Oyugi, 2019). Dairy goats contributed 4.2 per cent of the total milk production in the sector in 2016 (KDB, 2016). Unfortunately, policy and the legislative environment do not favour dairy goat production. For instance, CAP 336 defines milk as "milk for a cow", leaving all the other milk producers out. It is essential that goat milk production is mainstreamed

Dairy Goats



and related projects adhere to sustainability criteria

Approach and Results

The study was conducted among dairy goat farming projects in Tharaka Nithi County.

Social Economic implication of dairy goat projects. Dairy goat projects have faced the problem of sustainability affecting their ability to achieving both current and future needs. This study established that the key obstacles to sustainability include the high cost of dairy goats project management, poor market linkages, inadequate dairy goat husbandry skills and knowledge, infrastructural challenges, minimal support from the government in extension services, and expensive health services from private service providers. However, dairy goats have a high potential for improving the social-economic status of livestock farmers. The 39.4 per cent of dairy goat farmers have benefited from the venture and confirm its potential in livelihood improvement.

Dairy Goat project Beneficiary Targeting. The success of a project lies not in the fact that it is necessarily targeted, but rather in how it is targeted. This study found gaps in the way dairy goat projects beneficiaries are targeted leading to project failure. Key findings were:

Gender composition disparity: 56.9% of the dairy goat farmers were men and 43.1% women. Gender was not a consideration in dairy goat farming

Age Disparity: 42.6% were above the age of 50, while 42% were between 40-49 years, 14.4% were between 30-39 years. Only 1.1% were below 30 years.

Beneficiary needs: 48% of farmers were happy that their needs were addressed.

Dairy Goat Farmer Capacity. Sustainability structures such as community-based organizations (CBOs), cooperatives, and self-help groups are key to sustainable dairy goat projects.

Skills and Knowledge: Dairy goat's management is capital intensive compared to keeping the local goats and requires special skills, knowledge, and technics such as breeding, husbandry, management, healthcare, and infrastructure maintenance. Only 37.7% of dairy goat farmers have such skills and knowledge.

"Peer to peer learning and exchange was employed as a faster and sustainable method of information transfer but unfortunately only a few remaining initial farmers who were trained by the project officials have the necessary capacity; new farmers do not have" - Farmer

Resource Contribution: Only 33% of farmers could contribute financial resources to their projects without external support while 17% think dairy goat projects cannot succeed without the support from the government and NGOs.

Community organization: The majority of self-help groups formed to spearhead the

goat dairy farming projects disintegrated leaving only 47.7% of the farmers organized in strong self-help groups and are doing better than their peers not in groups.

Institutional Linkages and Support. Adequate linkage and involvement of relevant key actors and institutions in the projects at a different level are very significant. Gaps were identified in institutional linkage to support dairy goat projects.

Health service institutions: Dairy goat health services are available but at a high cost. There was a slow emergency response rate coupled with practising veterinary quacks. Only 16 per cent of farmers enjoyed quality, accessible and affordable services.

Market institutions: Markets are disintegrated and not within the reach of the majority. They rely on organized markets away from the community. There is also no specific market for dairy goats. Only 22.3% of farmers had access to the right market information.

"All the milk I produce is sold locally for domestic use and the price is too low. When I want to sell my goats, I have to be assisted by the chairman of the dairy goat breeder's association as there is no ready market locally" - Farmer

Linkage to Government institutions: Only 5.3% of farmers were linked to the government and other institutions for market and informational support.

Dairy Goat Farming Infrastructure. Good Infrastructure is a pre-condition improvement in the development of the livestock sector. Key informants noted gaps in the project design in that the initial dairy goat shelter designs were too standardized without considering the capacity of the farmers to maintain the same.

Shelter: 23.9% of the farmers indicated that the materials for the construction of the shelters were readily available but diminishing timber products were becoming expensive every day. Use of locally available material, that is simple and a less expensive design would have been a better approach.

"I used to have a very good, strong house for my goats, but now I am not able to maintain the house to the required standards due to the cost involved, lack of material. Again I have to pay someone to build it for me since I don't have the skills but I have no money so am waiting for the government to come for my rescue" - Farmer

Only 9% of the farmers were able to maintain their dairy goat shelter to the required standards. Communal breeding infrastructures were not within reach of all farmers. Only 19.1% could access and use the breeding infrastructure.

Markets: Markets are widespread covering long distances. Only 28.2% of the farmers were able to access dairy goat markets with ease.

Transport: Unlike local goats, dairy goats cannot be walked long distances. Transport infrastructure is lacking. As a

result, only 3% of the farmers were able to transport dairy goats correctly.

Policy Recommendations

Short-Term

- Allocate affordable financial resources for dairy goat projects.
- Enhance disease surveillance, monitoring and management
- Improve extension services and access to information
- Strengthen community self-help structures for peer support and access to resources
- Build vibrant market systems and value addition technology for dairy goat products

Medium-Term

- Gender mainstream dairy goat projects
- Support youth to venture into dairy goat farming projects through training and restocking strategies.
- Create a supportive environment for partnerships and collaborations to promote dairy goat projects
- Review of CAP 336, mainstreaming dairy goats and allocation of necessary resources especially during drought.
- Adopt appropriate technology to support key dairy goat's infrastructural development

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