

Intervention:	Integrated Rural Development Programme – Improvement of local goat breeds												
Country:	Kenya												
Date:	Since 2000 (?)												
Challenge:	Local goat breeds take a long time to mature and produce little milk												
Approach of the Intervention:	<ul style="list-style-type: none"> <input type="checkbox"/> The dairy goat project introduces a high quality Kenya Alpine buck to upgrade the local goats <input type="checkbox"/> Self-organization of farmers obligatory for registration and participation in the program <input type="checkbox"/> 3-day-training courses on dairy goat rearing 												
Benefits and Impacts:	<ul style="list-style-type: none"> <input type="checkbox"/> Increased milk production: Upgrading local goats by crossing them with purebred dairy bucks improves the milk production of the offspring. Each new generation of crosses produces more milk. At each stage, the female must be bred with a different purebred male to avoid inbreeding. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Breed/crosses</th> <th style="text-align: left;">Daily milk production</th> </tr> </thead> <tbody> <tr> <td>Local goat</td> <td>0.5–1 glass (250ml)</td> </tr> <tr> <td>1st generation</td> <td>4 glasses (1 litre)</td> </tr> <tr> <td>2nd generation</td> <td>8 glasses (2 litres)</td> </tr> <tr> <td>3rd generation</td> <td>12 glasses (3 litres)</td> </tr> <tr> <td>4th generation</td> <td>20 glasses (5 litres)</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <input type="checkbox"/> Improved crop yields. Intensive (zero-grazing) goat rearing produces a lot of manure, which is easy to collect. Goat manure makes good fertilizer for kitchen gardens, maize, bananas, macadamias, Napier grass and coffee. <input type="checkbox"/> Better use of waste. Goats eat all kinds of crop residues, household waste and foliage from trees, turning them into valuable milk, meat and manure. Goats are ideal for the small plots of land in the wetter areas of Embu District, as well as the larger farms in the drier parts of Mbeere District. <input type="checkbox"/> Increased value of the upgraded stock. The dairy goat project introduces a high quality Kenya Alpine buck to upgrade the local goats. The male offspring grow faster and mature earlier, so earn more income for the farmer. The female offspring produce more milk and earn more money as breeding stock. All goat products and by-products – live animals, meat, milk and manure – fetch prime prices. <input type="checkbox"/> Improved socio-economic status and cohesion. The project participants are members of groups where they share knowledge, resources, exchange visits and experiences. Even the poorest members can upgrade their animals. The members meet regularly to plan, review their activities, and discuss problems. They also get additional training on group dynamics and leadership. 	Breed/crosses	Daily milk production	Local goat	0.5–1 glass (250ml)	1st generation	4 glasses (1 litre)	2nd generation	8 glasses (2 litres)	3rd generation	12 glasses (3 litres)	4th generation	20 glasses (5 litres)
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Lessons learned:	<ul style="list-style-type: none"> <input type="checkbox"/> Keeping goats produces many benefits for farmers: they can earn money by selling milk, meat and living animals; they produce milk for home consumption; and they can even make cheese to sell. The manure is valuable as fertilizer and can be used to make biogas, a new technology which is spreading quite quickly. <input type="checkbox"/> Dairy goats are easy to manage, produce many kids and a lot of milk, and can be very profitable. Raising goats in confinement is environmentally friendly. It needs little heavy work, so can be done by women and men, young and old and people who are suffering from HIV/AIDS. <input type="checkbox"/> Local contributions towards the project enhance ownership and sustainability. Development projects should ensure that project 												

	<p>participants contribute in cash, even only a small amount – to ensure their commitment to the project.</p> <ul style="list-style-type: none"> □ Technical knowledge is a key to success. It is necessary to train the people on both, the technical aspects of goat keeping as well as the project's particular management procedures. □ Collaboration enhances success, especially where the partners' strengths complement each other.
Wider application:	<p>The dairy goat programme has scaled up its activities in various ways. These can be grouped into four categories:</p> <p><u>Quantitative</u>: The programme started with a stock of 55 upgraded nannies in nine groups. The process of returning the first female kid to another farmer in the group enables other farmers to benefit and ensures continuity of the project. To date, 160 farmers in 15 groups have benefited from upgraded dairy goats, and they now own over 450 upgraded goats.</p> <p><u>Organizational</u>: Participants must be members of a group that is registered with the programme. The Diocese established a project development committee composed of elected representatives from all the registered groups in an area. This committee is responsible for problem identification, planning, implementation, monitoring and evaluation. This allows the programme to reach more people.</p> <p><u>Functional</u>:</p> <ul style="list-style-type: none"> □ Upgrading local chickens: Seven out of the 15 groups in the goat project have diversified into upgrading local chickens. The local chickens are small and lay few eggs. The programme has advised the farmers to upgrade their local stock using a dual-purpose breed, Kenbro. This gives up to 270 eggs a year, compared to 150 eggs from the local birds. □ Biogas. Farmers from one group have built biogas digesters to use the goat manure and save on wood fuel. They copied this idea from one of their neighbours. They used polythene tubes to make the digester and storage tank. Pipes carry gas to a gas burner in the farmer's kitchen. The group has so far constructed five biogas units, and plans to make units for all 23 members. Other groups are also interested in adopting this technology. □ Savings and credit. Participatory needs identification revealed the need for the goat keepers to save money and have access to credit. The groups ensure that their members save a small amount regularly with the Mbeere/Embu Savings and Credit Association, a diocesan rural savings programme. This enables them to pay for school fees, medicines and other needs. The savings protect the farmers from the temptation of selling their valuable goats for low prices in an emergency.
Implementing agency & partners	<p>Diocese of Embu, Integrated Rural Development Programme Dairy Goat Association Kenya, Ministry of Livestock, MISEREOR (www.misereor.org)</p>
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