TIDE Annual Report 2017

Household Nutrition

Farm productivity

Milk quality

Regulation and Investment facilitation
TIDE Areas of operation

Southwest Milk sheds
Bushenyi, Isingiro, Kiruhura, Mbarara, Ntungamo, Sheema and Lyantonde.
## Summary of TIDE 2017 Results

- **€1.4 million (UGX 5.9 billion)**
  - Increase in Net income for dairy farmers of which 25% are women

- **640**
  - Number of Farmers trained at 3 PDTFs of which 34% are youth and 19% women, reaching 1,780 farmers in the TIDE outreach program

- **€ 680,000**
  - Amount invested by farmers on their farms
  - € 510,000 — leveraged by SNV from private sector and donor agencies

- **10**
  - Number of development partners SNV is working with

- **21**
  - Dairy Cooperative societies now classified as bankable (attractive to members and business partners)

- **12**
  - Number of grant agreements SNV TIDE project has signed with private sector companies delivering services and products to dairy farmers

- **36**
  - No of farmers that have constructed spray races

- **50**
  - No of farmers that have bought a chaff cutter

- **School milk**
  - **100,982**
  - No of children (54 % girls) drinking milk in 315 schools

- **1.5 million Litres**
  - Total Volume of milk consumed by school children

- **1.5 billion UGX**
  - Income earned by dairy farmers from supplying the school milk program (new market)
**TIDE Partners**

**Wageningen CDI** - Dutch knowledge institute: implementing M&E component + Action Research on CSA and school milk

**Dairy Development Authority** - Regulatory agency: institutionalisation of project interventions for dairy sector

**The Friesian** - Dutch consultancy: expertise on dairy farming (specifically QBMPs) and vocational training

**Uganda Crane Creameries Cooperative Union (UCCCU)** - Cooperative umbrella: institutionalisation and leverage of interventions

**Agriterra** - Dutch cooperative agency: expertise and leverage on cooperatives

**NARO** - National Research Agency: synergy and leverage on dairy production

**Veterinarians without Borders (Canada)** - Volunteer agency: supply of expertise on dairy production for smallholders

**Yoba** - Dutch NGO promoting pro-biotic yoghurt, creating value addition for smallholders and cooperatives

**Mbarara University of Science and Technology (MUST)** - National University, based in Mbarara, to partner on research and training activities.

**AgriProFocus** - Network, supporting lobby and advocacy, and expertise in multi-stakeholder processes.

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**SNV**
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<td>Exp 2017</td>
<td>Depletion</td>
</tr>
<tr>
<td>2017</td>
<td>%</td>
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<tr>
<td>Matching grants</td>
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<td>Contractual services</td>
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<tr>
<td>Staffing</td>
<td>22%</td>
</tr>
<tr>
<td>Project management and support</td>
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</table>

EURO

Savings on operational costs
Dear colleagues,

It is such a privilege to us as SNV to share with you this annual report that highlights the results that we have achieved in the dairy sector since we launched The Inclusive Dairy Enterprise (TIDE) project in October 2015. 2017 was a year of maturity for most of the project’s interventions and the TIDE approach has been validated through the results created. Input markets for dairy farmers were created, through product development and support to private sector companies delivering these products. Although training of farmers fell short of target, the PDTF business case was proven and the recorded impact justified its introduction.

TIDE has developed into a tight networking project, with 10 full-time staff in the Mbarara office, 10 partner organisations (both national and international), an increasing number of private sector service providers and various consultants, LCBs and regular interns. In addition, TIDE has built and established relations with a wide variety of dairy value chain stakeholders.

One key aspect of this project has been the
implementation of a School Milk Program aimed at reducing hunger and increase the dietary diversity of school age children within the target districts. While the School Milk Program was originally designed to assist 5,000 school children, the coming on board of Government through the Ministry of Education and Sports resulted in the expansion of this program to all schools within the project districts (Bushenyi, Isingiro, Kiruhura, Mbarara, Ntungamo, Sheema and now also Lyantonde). In 2017 the school milk programme was embraced by 315 schools with parents of over 100,000 school children directly contributing to the purchase of milk for their children. The beauty of this programme is the ripple effect it is creating; mobilising parents to appreciate the need to feed their children, leading to more healthy and attentive children in school with a potential to improve their grades and overall wellbeing; providing a new market and income for dairy farmers with 1.5 million litres of milk sold through the school milk programme and contributing to an increase in revenue from milk sales totalling up to UGX 1.5 billion to the dairy farmers.

Worth noting is the effect the project is having on dairy farmers who are at the core of the projects interventions. Many are aggressively transforming their dairy farming practices as a result of attending the practical dairy trainings. Many have sold cows in order to focus on productivity. Milk production per cow in the dry season went up by 103 % (and 56 % in the wet season), and as a result both milk production and incomes increased considerably.

Farmers are also taking advantage of the TIDE supported products such as artificial insemination, paddocking and fencing, water for production and general services to support feed conservation for the dry season (mostly the growing of fodder that is strongly expanding from a very low base). In 2017, SNV provided matching grants that enabled dairy farmers to invest € 770,000 into their farms towards the constructing of: milking parlours, water reservoirs, hay bunkers; pasture growing and purchase of machinery. We believe that these investments will result in increased milk production and incomes for the dairy farmers as well as the private sector.

Most of these results and uptake of these products would not have been possible without your trust and support, and the generosity of the Government of the Netherlands through its Embassy here in Uganda to support the dairy sector. Thank you! We pledge our commitment as SNV to continue championing for interventions that promote the sustainable development of the dairy sector and Uganda as a whole.

Michael J.F. O’Mahony
Country Director
SNV Uganda
Dairy Sector Developments
Uganda is emerging as a strong dairy exporter. While export to Kenya is still important, in terms of volumes it is now most likely overtaken by other countries. The export is dominated by two processors, i.e. Amos and Pearl. Until September, Amos was exporting 100% of its produce in form of casein, mainly to the American market. However, since September they are now also producing whey powder and UHT (all for export). Pearl is exporting 90% of its output, mainly in the form of milk powder and UHT (Lato), to other African countries, the Gulf States and Asian countries (including India and Japan). The processing capacity by the end of 2017 for Amos was 500,000 ltr/day (up from 300,000 ltr/day), while Pearl also expanded to the same capacity, and is expected to further expand to 800,000 ltr/day by April, 2018. The share of Brookside (formerly: SALL) in the Ugandan market remains fairly stagnant. Their domestic market presence remains strong (though with limited expansion), while their export to Kenyan (to the Brookside sister company) is volatile. The southwest remains an important source market for Brookside, with purchase in 2017 fluctuating from 20,000 ltr/day to sometimes 180,000 ltr/day. The main market developments in the southwest in 2017 (all estimates project guesses):

- Pearl and Amos are the dominant buyers in the market, and now buy most of the milk in the southwestern milkshed (60%);

- Brookside is also still an important buyer, as are JESE and Lake Side (10%) and some other smaller processors;

- The raw milk, purchased by milk traders and transported to Kampala as part of the informal market has significantly declined, and is estimated at 20% of the total milk market in the southwest (though in absolute volumes it is still significant);

- Approximately 10% of the locally marketed milk is traded informally within the milk shed (not counting milk sold to neighbours and consumed on the farm).

While the above figures are broad indications, part of the reasons for making estimates difficult is the fact that trends are widely fluctuating in the sector:

- A key factor remains the wide variations between wet- and dry season milk production. A widely quoted estimate is that dry-season production is 40% of wet-season production. In one of our own surveys, this figure was 60%.
- With exports now dominating, the Kenyan market was particularly influential. Not due to its size, but due to its volatility. The failure of the April rains in Kenya created opportunities for export from Uganda (mainly through Pearl and Brookside), which were curtailed when Kenya allowed the importation of duty free milk powder later in the year. As this importation was mainly done by Brookside, a consumer boycott of its products (associated with the repeated Presidential polls) created space again for competing products from Uganda (Pearl, and now also Amos, JESE and Lake Side).

- Linked to the above factors, prices also fluctuated wildly in 2017: from a high of UGX 1,350 (in August) to a low of UGX 500 (in November), though overall there is an increasing trend.

With the export market now dominating the southwestern milkshed, world market prices and performance of the processors in the export market become important denominators. The strongly increasing trends are likely to continue for some time, as processors are still expanding capacity (Pearl from 500,000 ltr/day to 800,000 ltr/day) and are also projecting increasing sales. Informal projections predict exports of up to USD 150 million in 2018, making dairy the second highest agricultural export commodity in Uganda (after coffee).
The Netherlands Government through SNV Netherlands Development Organisation has been implementing a dairy (The Inclusive Dairy Enterprise – TIDE) project in South Western Uganda. The project which was launched in October 2015 aims to improve dairy farm incomes for 20,000 farmers by addressing the following:

- Improving farm productivity through; the establishment of practical dairy training farms, support on-farm investments, strengthen cooperatives and improve dairy services to farmers
- Improve milk quality through the introduction and promotion of quality based payment systems
- Improve regulation and investment facilitation
- Improve household nutrition by; supporting the introduction of milk in schools and promoting dietary diversity at household level

The project operates in the districts of Bushenyi, Isingiro, Kiruhura, Mbarara, Ntungamo, Sheema and Lyantonde (added recently) and now in its third year is creating tangible results, having developed a number of relevant products and services for dairy farmers, delivered by the private sector.

The TIDE project rides on the wave of transformation in the dairy sector in southwest Uganda. Investments from processors contributed unprecedented USD 120 million in 2017 largely from export of milk and its products which has led to an increase in the demand for milk and subsequently an increase in price. Unfortunately, this has not yet translated into stable value chain relations between processors, cooperative societies and dairy farmers.

The TIDE interventions are creating a ripple effect, with at the core a group of dairy farmers, who are aggressively transforming their dairy farming practice. Many farmers (640 so far) have attended the practical trainings at the Practical Dairy Training Farms (PDTFs), creating almost immediate impact at the farm level. The initial batch of trainees sold half of their lactating cows in order to focus on a few and boost their productivity. Subsequently milk production per cow in the dry season went up by 103 % (and 56 % in the wet season), leading to an increase in milk production and incomes.
Based on data generated by the project, at least 500 farmers engaged in growing fodder, who had not done so before. Outreach research (carried out by MUST) indicates, that on average farmers planted about 12 acres of fodder crops, bringing the total acreage to 6,000 acres. Assuming the yield per acre to be 7 tonnes, than total yield is at least 40,000 tonnes. According to Kato et al (2006), to produce 1 litre of (extra) milk per day, about 4 kg of silage is required, and so the available silage could contribute to an additional 10 million litres of milk. At an average price of UGX 800 this alone could potentially contribute UGX 8 billion to indicator 1.1 (Increase in net farm income as compared to baseline year).

SNV has done great work. I have been a farmer for a long time and yet I didn’t know that I could harvest and store grass to feed my cows in the dry season and maintain the milk yield. In 2017 I finally planted pastures and harvested over 5 tonnes of Napier grass and maize which I used to make silage. My cows have been feeding off this silage throughout the dry season and they look very healthy and are giving me enough milk. This was possible because I was able to buy a tractor from Engineering solutions through their partnership with SNV. My neighbours have been motivated to take up commercial farming and have started hiring the tractor to open up their land to cultivate pastures for their animals.” Honorable Yaguma Wilberforce MP Kashari North, Mbarara District

Bells Katongole, a dairy farmer and Chairman of Abesigana Kashari Dairy Cooperative in Mbarara district signed up and attended one of the practical draining trainings. For most of his life he had been running his farm remotely by phone from Kampala where he was working as a public servant. Because of his absence from the farm, his business struggled and he failed to get his breeding business off the ground. In 2015 he retired and decided to return to his farm and focus on his farm but it was no walk in the park. “I still struggled with finding feeds for my cattle to be able to maintain the quality that I wanted. I got to know about the SNV dairy project and decided to sign up for one of their practical dairy trainings. Through the training I learnt how to grow pastures for our cattle and make silage and hay. I also learnt about the importance of having a milking parlour. The training made sense, the owners of the practical dairy training farms where I attended the training were
successful. I returned inspired and encouraged to carry out farming as a business.”

The first thing Bells did upon his return was to call up his son, a teacher by profession and request him to come and support him at the farm. Most of his children, Bells explains had grown up seeing him struggle with farming and had opted to pursue careers in other professions other than farming because the farming they had witnessed was not very lucrative. Having seen other successful dairy farmers Bells knew that he could achieve the same. With support from SNV, He built a milking parlour that could accommodate 14 cows. To encourage the cows to come and be milked in the milking parlour, Bells was advised to supplement their feeding during milking time. This soon became a normal practice at his farm. They would give the cows hay and silage as well as minerals and their milk increased significantly! At the PDTF, Bells had also learnt how to grow his own pastures and the importance of paddocking as a pasture management practice which lessons he implemented in his farm. “For the first time in my life as a farmer I was able to feed my cattle throughout the year, even during the severe drought. As a result of this we did not experience a significant reduction in our milk. Where before we used to get 100 litres of milk in the rainy season and 50 litres in the dry season, now our average is 250 litres in the rainy season and 150 in the dry season from our 35 milkers.”
TIDE Annual Report 2017

TIDE has created new business opportunities for us which is exciting

SNV in the last one year has been encouraging farmers to grow pastures for their cattle, one of the measures aimed at increasing milk production even in the dry season. Through the practical dairy training farms, farmers are exposed to various pasture management options so that they can feed their cattle throughout the year. To encourage more farmers to mechanise their farms, SNV through the TIDE project entered into a partnership with ENGSOL, offering 25% subsidy to farmers who bought tractors from ENGSOL. ENGSOL on their part linked farmers to Post Bank where farmers could access up to 55% of the funds needed to purchase the tractors at 12% and 13% interest per annum. In one year (2017) ENGSOL sold 9 tractors and 38 implements through this arrangement. The tractors and implements that farmers bought were predominantly for production (for ploughing, harrowing and planting).

Farmers quickly cleared their land and planted maize and pasture grass. By November most of the farmers’ pasture fields were ready for harvest. Many of the farmers had planted over 20 to 30 acres of pastures and this needed to be harvested fast before the sun dried out the grass and maize. Following the call from Rinus, the TIDE project manager for support, ENGSOL quickly mobilised 5 tractors, trailers, forage harvesters and hay making equipment; staff to operate and support the equipment; and sent them to South Western Uganda to help farmers harvest their pastures. “This was something we had never done before. However we knew that the stakes were high. What would happen to these farmers who had invested so much to grow pastures for their cattle if they were not able to harvest their grass in time? Many would have lost their grass and the consequences would have been terrible,” Ian adds.

By providing the harvesting services at a subsidised fee of between 700,000 – 800,000 UGX per day, ENGSOL was able...
Youth Agripreneurs, the untapped labour force with the potential to transform the dairy sector.

to help farmers who would not ordinarily have afforded the 38 million UGX needed to buy a simple harvester or 60 million for hay making equipment. With the harvesters, farmers could now harvest up to 7 acres in one day. Within one month, ENGSOL had helped farmers harvest 500 acres of pasture and maize for their cattle, most of which was used to make silage.
Youth Agriprenuers, the untapped labour force with the potential to transform the dairy sector.

In 2017, the cattle corridor experienced a longer than normal dry spell. During that period, the price of a fully grown cow or bull went as low as Uganda Shillings 150,000. Farmers were desperate to sell because their herds were starving due to lack of water and feeds.

With the bad experiences from the long dry spell, the months that followed the dry spell saw a number of farmers grow fodder (maize corn and Napier grass) on their farms. This awakening was facilitated by TIDE’s subsidy to private farms that were interested in mechanising their farms for fodder and pasture production. With the increase in acreage of land under fodder production, farmers soon faced a harvesting dilemma. There were no ready service providers or equipment that could support farmers in harvesting fodder. Seeing this gap, the TIDE project team worked closely with 10 different cooperatives to pilot a youth led model on fodder harvest as service. The scheme required that an interested cooperative organises a group of youth Agriprenuers interested in contributing resources to purchase a fodder chopping machine –chuff cutter.

Through a series of buy-in meetings, 7 cooperatives were successful in establishing different groups of 4-12 youths. As a control measure, each youth group was required to contribute UGX3.5million (which is 50% of the total purchase price of 13HP 9ltr chopper). With the half payment in place by the group, TIDE project then matched it with a top up of Uganda Shillings 3,500,000 as a subsidy through the machine supplier 4DIZ.

The youth groups were then provided with basic skills training on business sourcing, planning and management. To date the ensiling services provision is providing jobs to a total of 43 youths. The youth groups charge between Uganda shillings 100,000 to 200,000 per farmer depending on volume of work and acreage. In the last two seasons, youth groups from the 7 cooperatives (Bukanga, Nyamitsindo, Kabuyanda, Sanga, Rubaale, Ntungamo and Masha) have been able to harvest a combined total of 593.3 acres of fodder earning them an aggregated revenue of Uganda Shillings 71,196,000 over two harvesting windows totalling to 3 months. With more farmers growing fodder, the potential for youth to earn more income is enormous. In 2018, SNV plans to support an additional 30 cooperatives to form youth groups to help farmers make silage.
Dairy services and on-farm investments

One of the TIDE project objectives is to support farmers move from subsistence dairy farming to commercial farming by supporting farmers in creating demand (through training, demonstration) and supporting the private sector in establishing supply that meets quality requirements, is affordable and reliable.

The table below provides an overview of the products, that the TIDE project supported in 2017.

<table>
<thead>
<tr>
<th>Product</th>
<th>Private sector</th>
<th>Subsidy/grant</th>
<th>Results 2017</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PDTF training</td>
<td>Three modules of 4-days each: on dairy nutrition, disease control and breeding</td>
<td>AGDI, RDd, Mutanoga</td>
<td>Training is full cost recovery; Subsidies for women and youth (50 %)</td>
<td>370</td>
</tr>
<tr>
<td>Dairy services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanisation</td>
<td>Tractor and equipment for dairy production,</td>
<td>EngSol</td>
<td>25 % subsidy</td>
<td>6</td>
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<tr>
<td>Artificial insemination</td>
<td>Results-based AI services, including screening and preparatory services</td>
<td>CKL + 13 AI providers</td>
<td>Incentive scheme</td>
<td>1,520</td>
</tr>
<tr>
<td>Spray race</td>
<td>Supporting farmer to construct a spray race for tick control</td>
<td>Kzewayo Ug Vet Pharmacy</td>
<td>15 % (40 % of frame, with civil works paid by farmer)</td>
<td>36</td>
</tr>
<tr>
<td>Farm record App</td>
<td>An App, through which farmers can keep on-line records and monitor</td>
<td>-</td>
<td>50 % on smartphone; Incentive scheme: UGX 2 million voucher for every 6 months of records</td>
<td>10</td>
</tr>
<tr>
<td>Chaff cutters</td>
<td>Access to chaff cutters and choppers for silage making</td>
<td>4DIZ</td>
<td>25 % subsidy</td>
<td>34</td>
</tr>
<tr>
<td>On-farm investment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water for Production (pilot)</td>
<td>Integrated water system for the farm (pump, rising main, reservoir)</td>
<td>Adritex, Water-Works</td>
<td>40 % (or more, if solar power): pilot closed in 2017</td>
<td>22</td>
</tr>
<tr>
<td>Water reservoirs</td>
<td>Water storage on-farm</td>
<td>Balton</td>
<td>Subsidy of 25 % of total costs (digging + dam lining)</td>
<td>-</td>
</tr>
<tr>
<td>Water for Production (integrated)</td>
<td>Access to water to distribute and store within the farm (tailor-made)</td>
<td>Water and Pumps Int.</td>
<td>40 % subsidy</td>
<td>46</td>
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<tr>
<td>On-farm infrastructure</td>
<td>Construction of infrastructure (e.g. milking parlours) on dairy farms</td>
<td>Rwakas-mwema</td>
<td>Pay for labour (25 % of total costs)</td>
<td>25</td>
</tr>
<tr>
<td>Paddocking and fencing</td>
<td>Carrying out farm survey, design of farm lay-out and actual paddocking of farm</td>
<td>BM Investment</td>
<td>50 % of total costs</td>
<td>142</td>
</tr>
<tr>
<td>Biogas</td>
<td>Construction of biogas plant on dairy farms</td>
<td>Biogas Solutions Uganda</td>
<td>UGX 250,000 per plant (15 %) + marketing subsidy</td>
<td>154</td>
</tr>
</tbody>
</table>
It is a Win-Win Situation for BM Investments and dairy Farmers

BM Investments is a family owned business that has been operational since 1984. The company built its business around supplying electrical poles and mail wire fences, and providing treated timber for the construction industry. The company largely operated comfortably as a monopoly, acquiring trees and selling fencing poles to walk in clients with no extra after sales service from the company. “At the time, farmers who came to buy fencing poles bought their poles with no guidance from us on what they were going to use their poles for or analysis of their need. We simply sold them the poles and it didn’t matter whether they bought more poles than they actually needed,” Theodora, the Executive Director BM Investments reflects. Average annual sales from the treated fencing poles stayed at 35,000 poles annually earning the company 210 million Uganda shillings in gross revenue which the company was comfortable with.

In the last two years, the company saw a dip in some of its products. Demand for fencing wire products slowed down significantly and the company was forced to close it down. SNV on the other hand was looking for service providers with a comprehensive knowledge of paddocking and fencing that could provide dairy farmers with treated poles. Efforts to get providers that could provide paddocking services and convince farmers to carry out paddocking had been largely futile and SNV was almost giving up on the product. Theodora decided to partner with SNV to market the product.

Through partnership with NARO, SNV supported BM Investments to develop guidelines for paddocking and fencing to address the knowledge gap and to be able to provide technical assistance to farmers to effectively utilise their land and pastures. “Our first experience of providing poles was with a young farmer called Ronald Mugisha. When we had initial discussions with him we realised he did not have a thorough awareness of his farm needs, the number of poles or paddocks he needed. We realised that to be able to effectively support farmers in paddocking and fencing, we needed a farm Map to guide us. This was our light bulb moment. We had to change our business model to move beyond selling fencing poles to providing extension service that covers farm planning as the first solution.” Theodora elaborated.
BM Investments now requires all clients interested in paddocking and fencing their farms to first carry out farm planning so that the company can generate farm maps that will inform them when generating bills of quantity based on the farmer’s acreage. For dairy farmers that have largely managed their farms by instinct, adapting their practices to climatic conditions, farm maps is a welcome innovation. Now they are no longer passive actors in their business but active participants with clear direction and justification why specific structures like milking parlour, calf pen, water troughs, and paddocks have to be allocated where they are because the farm map guides them. In the last six months since they changed their business model, BM Investments has more than doubled their sales selling 80,000 poles to 100 farms, earning the company 480 million UGX in gross revenue.
Kabura Farmers’ Cooperative, dominating the Milk market with no apologies

Growth can be slow and protracted, but it can also be quick and almost instantaneous. Kabura society knows what it means to be on both sides of the growth curve. Established in 2011, the society experienced slow growth in its first four years, collecting an average of 6,000 litres of milk per day from its 89 members. With only two milk collection centres (MCCs) the society could only do so much. This was soon to change with the business support and training of the society’s management by SNV and Agritera.

In 2016, SNV through Agritera trained the management team on governance, financial management and how to run the business as a profit-making organisation. “We learnt about the importance of maintaining and retaining our customers by treating them as owners of the business. We were also taught about the importance of getting our members involved in the society’s activities as a means of ensuring that they remain committed to the society,” Samuel elaborates. The management decided to act on the recommendations. They established seven committees compromising of three members to handle different components of the society’s business. In 2016, the society gave its members dividends for the very first time, something Samuel attributes to the trainings they received. They also partnered with Solar now to provide solar products to their members at subsidised rates, with the society as the guarantor.

The society also realised that to expand and get more members and increase on their milk collections, they needed to take their services closer to the farmers. In 2016, the society established four additional MCCs within Lyantonde district where the society is located. Within a period of one year, their membership numbers increased by 48% from 89 in 2015 to 132 members at the end of 2016. In 2017 they established 3 additional MCCs which enabled them to reach even more farmers, almost at the farm gate. Each collection centre has a sub-committee that undertakes community outreach to farmers to promote the society and its services. As a result, the society registered 63 new members, raising their numbers to 194. Currently the society collects an average of 27,000 litres of milk per day which milk is all sold to Pearl Diaries.
One of the approaches identified by the project to improve productivity at farm level is the Practical Diary Training Farming approach. Through this approach, model dairy farms (at different levels and in different locations) are identified and supported to develop into model training centres that can offer short practical courses to dairy farmers within the 6 target districts. Three farms (AGDI Dairy Farm and MUTANOGA Farm in Kiruhura district and Rubyerwa Dairy Investments in Mbarara district) were selected, based on their performance in the ‘best farmer’ competition (overseen by the Dairy Development Authority (DDA), New Vision and the Embassy of the Kingdom or the Netherlands (EKN) in Uganda and their subsequent interest in the concept during the TIDE project formulation.
While conventional development approaches have been characterised by handouts, with farmers predominantly accessing free extension services and getting allowances for participating in the trainings, the Practical Dairy Training Farming model is private sector led and demand driven. Farmers identify their individual needs based on their specific production challenges and pay for the training to bridge the identified knowledge/skills gap. The trainings which are carried out at the dairy training farms provide participating farmers the opportunity to practice their learnings and skills while at the farm. Currently the trainings are based on three thematic areas: Feeds and Nutrition, Breeding and genetic gain, Animal health and Disease control.

“Times have changed. We cannot continue milking our cows in the bush. Milk production has become very commercialized and milk traders are demanding quality milk and more milk. With this milking parlor I will not only be able to start milking early unlike now when I have to wait for daylight, I will also be able to supplement the feeding for my cows as I milk them which will give me more milk,”

John Tuhamize, a dairy farmer in Mbarara district invested 6.5 million Uganda Shillings (1,700 Euros) towards the construction of a milking parlor after attending one of the PDTF trainings.

The PDTF approach is based on the following principles:-
- The courses are not curriculum based, but issue-based (i.e. address specific constraints in the production cycle), as identified by the project and as experienced by the farmers.
- Farmers can select the trainings that are most relevant for their situation, but they can also attend more than one training at different PDTFs.
- The training is not an end in itself, but aims to assist the trainee farmer to practice on their own farms the issues being taught. The trainings incorporate follow up of the trainees at their individual farms to facilitate uptake and perfection of skills learnt at the dairy training farms.
Milk production at my farm has more than doubled since I started giving my milkers enough water

Stephen Khira, a dairy farmer from Kiruhura district, was one of the first farmers to sign up for the SNV practical dairy training. All his farming life, Stephen had grappled with water shortages, a situation that was exacerbated by the location of his farm (in one of the water-stressed areas in Kiruhura). Despite having a valley dam, the dam was located 1 kilometre away from his farm and his cattle herd, including the lactating cows, had to walk this distance to drink water. In the dry season, his dam often dried out and his cows had to walk even further in search of water from his neighbours. Despite his 123 milking herd of Friesian cross breeds, Stephen’s cows never gave him more than 100 litres of milk per day during the dry season.

In 2016, following the launch of the practical dairy training initiative, Stephen signed up for the training at Rubyerwa PDTF as one of the pioneers. The training covered two thematic areas: Feeding and nutrition; and breeding & genetic gain. The farmers not only learnt about the benefits of having good breeds and how to feed and grow their own pastures but the importance of having constant water for their animals to drink if they were to increase their milk yields. Provision of constant water necessitated farmers to construct water reservoirs and dam line them so that they could channel water to the drinking troughs within the farm, which was no cheap venture. Many farmers had reservations in partnering with SNV. They had never heard of such interventions. Stephen however was in desperate need of water for his lactating cows. He applied for the water for production subsidy being offered by SNV and started excavations for an underground tank.

With support from SNV, Stephen completed his 128,000 litre underground tank. During the 2017 dry season, he was able to collect water from his tank and provide his cows with water in the milking area with a mobile metallic watering trough. He has now constructed a concrete self-watering trough near the milking parlour and plans to extend the water to the paddocks. “Since I started providing water for my lactating cows, the milk production at my farm has more than doubled from 150 – 200 litres to an average of 250 – 300 litres per day during the dry season. In the rainy season, our milk production goes up to 700 litres per day. I know that once I start supplementary feeding for my cows, I will be able to increase my milk production in the dry and rainy season,” a happy Stephen explains.
With support from SNV, Stephen completed his 128,000 litre underground tank. During the 2017 dry season, he was able to collect water from his tank and provide his cows with water in the milking area with a mobile metallic watering trough. He has now constructed a concrete self-watering trough near the milking parlour and plans to extend the water to the paddocks. “Since I started providing water for my lactating cows, the milk production at my farm has more than doubled from 150–200 litres to an average of 250–300 litres per day during the dry season. In the rainy season, our milk production goes up to 700 litres per day. I know that once I start supplementary feeding for my cows, I will be able to increase my milk production in the dry and rainy season,” a happy Stephen explains.

Through the SNV project, farmers are able to get subsidies to construct water reservoirs over ground or underground.
2017 Financial Report

Summary

Total 2017 TIDE budget €2.5 million

The core objectivity of the project is to contribute directly to increasing dairy farm productivity. The project exceeded its budget largely due to the increase in the demand for matching grants for TIDE products by farmers. In 2017, the matching grants constituted almost half (43%) of the total expenditure on this component.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Budget 2017</th>
<th>Exp 2017</th>
<th>Depletion 2017 %</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matching grants</td>
<td>520,000</td>
<td>607,016</td>
<td>117%</td>
<td>Strong response from farmers to TIDE products, especially towards the end of the year.</td>
</tr>
<tr>
<td>Contractual services</td>
<td>260,000</td>
<td>277,506</td>
<td>107%</td>
<td>Increasing use of LCBs, part also CDKN</td>
</tr>
<tr>
<td>Sub contracting parties</td>
<td>490,000</td>
<td>513,170</td>
<td>105%</td>
<td>Stronger role for partners</td>
</tr>
<tr>
<td>Field activity implementation</td>
<td>180,000</td>
<td>181,011</td>
<td>101%</td>
<td></td>
</tr>
<tr>
<td>Staffing</td>
<td>480,000</td>
<td>472,700</td>
<td>98%</td>
<td></td>
</tr>
<tr>
<td>Project Management and Support</td>
<td>160,000</td>
<td>136,081</td>
<td>85%</td>
<td>Savings on operational costs</td>
</tr>
<tr>
<td>SUBTOTAL</td>
<td>2,090,000</td>
<td>2,187,484</td>
<td>105%</td>
<td></td>
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<tr>
<td>Management fee</td>
<td>313,500</td>
<td>331,489</td>
<td>106%</td>
<td></td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td>2,403,500</td>
<td>2,518,972</td>
<td>105%</td>
<td></td>
</tr>
</tbody>
</table>
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