



2016

# ANNUAL REPORT



### *About FT Kilimanjaro*

FT Kilimanjaro (FTK) is a non-governmental organization registered in Tanzania. FTK is a joint initiative of the Dutch FEMI Foundation and TPC Company Ltd. We envision flourishing communities in Lower Moshi void of poverty and despair: Communities where all, men and women, young and old, have access to basic health care, education and opportunities to be productive and earn a livelihood for themselves and their families, and to do so in a self-sustaining and environmentally sustainable manner.

*Lower Moshi* refers to southern part of the Moshi Rural District part of the Kilimanjaro Region in northern Tanzania. The area is south of Moshi Town and dominated by the 16,000 hectare TPC sugar cane estate. An estimated 75,000 people live on and around the estate, spread out over three Wards (Arusha Chini, Mabogini, Kahe) in Moshi Rural District and a small number of villages in adjacent Districts and another Region.

Guided by the concept of an integrated approach to development, with interventions applied simultaneously and across multiple sectors, our work is built around long term goals for four sectors (Education, Health, Income, and Infrastructure) that are interconnected. Using these goals and concrete implementation-related objectives we have explicitly set out to create a framework that is meant to be an invitation to other stakeholders, including the community, lower government authorities and other NGOs, to identify what goals and sectors align with their objectives and to consider working collaboratively with FTK toward the accomplishment of a shared vision.

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## Foreword

2016 Was a typical year for FT Kilimanjaro during which we were active in four villages and across Lower Moshi, at any given time engaged in dozens of different large and small activities. For the first time in our organizational history we said goodbye to one of our team members, James Ashire, who left after 2,5 years with FTK as Mikocheni Village Project Leader. James returned to his home in Kenya after a making terrific contributions to our organization and the communities in Lower Moshi, in particular of course Mikocheni. We will miss James and the leadership he provided to our programs. James himself identified his successor and in 2016 Kuya Nangai joined FTK. The transition has been smooth.

In the background some changes are developing that will herald a new phase for FT Kilimanjaro. One of FTK's largest donors will be winding down its support over the next 2-3 years, the foundation has spent down its own endowment as was their plan all along. This means that FTK will seek one or two new supporters who are able to partner with us to sustain our work through our current 10-year vision plan. FTK remains blessed with the ongoing support of its founding partners FEMI and TPC, which provide a very firm foundation to our organization.

We hope you enjoy reading up on a variety of the activities we chose to highlight here in this annual report. Like other years, we have attempted to give you a flavor for the year while communicating the interconnections of our integrated approach to development.

We thank you and all our supporters for their ongoing support of our work. Feel free to contact us with any questions or queries!

*The FTK team in Tanzania*

## 2016 in Numbers

### EDUCATION

**150** School desks provided to primary and secondary schools in Lower Moshi.

**6** Primary schools head teachers and their assistants and school boards have been trained in school management during a year-long program.

**3** Weeks of music training provided to the staff of 1 secondary school and 2 primary schools.

**218,000** School lunches served.

**1** Sports event of 3 days for Mikocheni Primary School with 700 pupils.

**70** tablets made available to 3 Primary schools for Math and English lessons, as part of an intensive, multi-year program to integrate tablet learning into the regular curriculum.

**73** Students supported with scholarships for secondary and post-secondary education including many vocational training.

**4** Class rooms and **1** teacher room renovated at Mikocheni Primary School.

**120,000** Bus trips to- and from school for hundreds of secondary students daily.

**39** girls in Langasani Secondary participated in a year-long girls empowerment program developed and run by FTK partner AfricAid.

### INCOME & AGRICULTURE

**1** Borehole was constructed (the 4<sup>th</sup> one) at the farm to support demand for water (irrigation and drinking).

**24** Entrepreneurs received start-up capital for their new businesses.

**80** acres of land have been added to the irrigation Farm.

**5,700 kg** of green beans were produced for export to Holland.

**1** Agricultural exhibition was organized, with 18 exhibitors and visited by over 350 farmers from Lower Moshi.

**36** Single mothers were supported with capital for their businesses.

**24** Acres of marginal land have been brought under irrigation by the community of Remiti. Envisioned, paid for and implemented by the Maasai community of Remiti.

## HEALTH

**713** Children received their annual medical check-up at the second medical camp at Mikocheni Village.

**9,109** Doses of deworming medication administered to 3,500+ pupils at 17 pre-primary and primary schools across two semi-annual campaigns.

**2** Health clinics/dispensaries built by FTK – in Kirungu and in Mserikia – have been handed over to the government.

**40** Trips taken by the Mama Bus, **54** pregnant ladies and **426** newborns and their mothers received care and advice.

**42** Patients received financial support from the FTK Medical Emergency Fund.

## OTHER

**1** Community Development Centre was built in Mikocheni, to be used for community events.

**20km** Of road was constructed or renovated.

**1** School biogas demonstration installation was built with partner SimGas at Ronga Primary School in Mikocheni.

**2** New staff members were added to the FTK team.

**3** Bridges were built, the biggest one measuring a 16m span, connecting the north and south of Chemchem Village.

**304** Solar lanterns and **263** improved woodstoves were sold in Lower Moshi by FTK partner GCS.

**5** Noticeboards have been placed in Chemchem village to support communication with the community.

## The Villages

### Mtakuja/Mserikia Village Project

Mtakuja and Mserikia were the site of FTK's first project in 2008. The last few years FTK has significantly scaled back its involvement in the villages. The community still engages with several FTK activities under the Lower Moshi program, but generally, FTK's direct involvement is kept to a minimum. The exception is FTK's continued effort to inspire, encourage and support an increase in agricultural productivity. Even so, here we focus on providing economically viable solutions and seek to appeal to the entrepreneurial spirit of community members.

### Drip Kits

One donor made available 25 drip kits that are designed to service ½ acre plots (67m by 33m) and significantly reduce water consumption. This area has increasingly grown drier over the past 20 years, with some areas barely receiving more than 300mm of rain per year, making systems that make efficient use of shallow well water critical. In 2016 FTK handed out 3 drip kits systems to start demonstration pilots in the communities, run by community members. The farmers will have to dig shallow wells and going forward the drip kits will be made available on a lease-to-own basis. Using these drip kits these pilots have demonstrated that it is possible to grow a variety of valuable – and nutritional – crops, including sweet melon, butternut, African kale and lettuce.

### Expansion of the Farm

After a very long and drawn out process, the communities from Mtakuja and Mserikia under leadership of the *Mtakuja Development Organization* (MDO), decided to accept a significant soft-loan from FTK partner Zero-Kap. This loan has been used to finance the expansion of the current community farm from 120 acres to 200 acres. Construction of the infrastructure (a new borehole, extension of powerlines, underground piping) started in earnest in late 2016 and should be completed during the first half of 2017. TPC again supported some of the work by making its earth moving equipment available to help with the clearing of the new farm land. The MDO has coordinated and paid for all local labor required for the excavation of the trenches, laying the piping and other works.



*Construction of the power lines.*

The expansion will mean in practice that most households in Mtakuja and Mserikia will be able to cultivate a plot in the farm once a year. This literally shares the wealth and enables 700 to 800 households to gain access to significant income and to help assure general food security in the communities.



## **Mikocheni Village Project**

Mikocheni is the site of FTK's second village project, first explored during the second half of 2012 and first half of 2013. During the past few years FTK's activities have grown in number and have started to address specific issues in the community as they were identified by the community. Our conceptual approach to this second project site was like the first project site, but many of the practical interventions have been tailored to Mikocheni's specific needs and wishes.

In 2016, we conducted our mid-term survey to track progress and gather feedback from individual community members on the current state of affairs in the village. The findings were a bit puzzling and possibly somewhat contradictory in areas. When asked about the Project Committee's performance and FTK's work, the answers were generally very positive, with respondents identifying the school improvements, the introduction of a small loans fund and the construction of the cattle dip as most meaningful interventions. On the other hand, we saw a number of negative trends emerging from the survey, in particular in the responses to the quality of life questions, with many respondents answering more negatively when asked about the status of their lives in general and their financial and health status specifically. These trends could be the result of a number of things coming together, including challenges beyond the community's control, like the new prohibition to utilize the large lake south of Mikocheni for fishing and the ongoing climate and ecological challenges experienced by the large pastoralist community. FTK will continue to monitor our programs and the community's experience and adjust where needed and possible.

## **The Mikocheni Community Center and Community Leadership**

Over the years, FTK has put more and more emphasis on the role of the community and community leadership for the programs we implement together. Where in the past FTK may have started out in the "driving seat", in Mikocheni (and subsequent communities) we have focused on putting in place community leadership during the very early stages of our engagement with the community. In Mikocheni this push for local leadership came with a desire for a physical space that could become an important official meeting and informal gathering place. In 2016 the strikingly designed (by FTK partner C-Re-Aid) Mikocheni Community center was officially opened and is today used for a wide variety of purposes. Leadership workshops by Hakikazi Catalyst, traffic safety training conducted by the police, the FTK annual medical camp, to name just a few. FTK's staff uses the Center as its office in the village and is present on specific days each week, this assures very open communication channels, FTK's village project leaders are indeed very immersed in the communities. The Mikocheni Village Project committee runs a small agriculture and veterinary shop at the Center, providing both an important service to the community and helping in providing the Committee with some income to support their other activities. The start-up capital for this business was provided to the Project Committee by FTK in the form of a loan.

In 2016 Hakikazi Catalyst, a rights-based NGO from Arusha, held several trainings for three villages in Lower Moshi, including Mikocheni. The training is focused on strengthening the village government council from the level of sub-village to ward level. An important goal is to make sure that all stakeholders in the community fully understand their own responsibility as well what they may expect from their village and local governments. The community is provided with tools and methods to properly help keeping their leaders accountable and to improve processes in the community to assure input is gathered and heard from all community members, including traditionally vulnerable and marginalized groups.





*The Mikocheni Community Center during the introduction of Kuya Nangai and goodbye gathering for James Ashire.*

### **A livestock center and other smaller initiatives**

In 2015 five bulls of a better, sturdier breed were purchased by FTK as a way to start a program to improve the quality of the herds in Mikocheni village. In 2016 8 heifers of the same better breed were added to this herd. This herd will become the centerpiece to a new social enterprise that FTK hopes to create in 2017 in partnership with its sister organization, HRSV. A feasibility study was completed in 2016 to inform the creation of this new business. The basic concept is that this new business will serve as a source for better genetic material to help the community upgrade their herds, while being encouraged to reduce the overall size of their herds. The business's main source of income will come from the sale of fattened cattle into the local meat market. The business will also provide access to information about better fodder and grazing practices and the business will serve as a center of best-practice. TPC has agreed to make land available on the estate for this new livestock business, in turn, the herds managed by the business will be used to graze on and maintain marginal areas on the estate and in doing so contribute to the overall management of the estate.

Many other activities were ongoing in Mikocheni in 2017, too many to list, but here is a quick overview of three of such activities:

- The international NGO Global Bike has been a partner of FTK for several years. In Mikocheni they have supported a group of women by donating bicycles that this group now rents out among themselves and to other community members. A team from Global Bikes came to visit and they were excited to hear about how the bicycle project is helping the community. The group identified a number of direct benefits that included a source of income, access to cheap transport in the village, access to emergency transport, access to transport for such basic needs as the collection of water.
- The Belgian NGO C-Re-Aid conducted another house construction demonstration project in Mikocheni. The house was donated to an elderly man in the village and was built innovatively, but only with the use of cheap and locally available materials so as to assure the house is an actual practical example for others.
- This past year we also introduced a new initiative in the education program in Mikocheni (and Chemchem): Pay for Success. This simple program based on the concept of only rewarding successful outcomes was introduced at the start of the school year. Two teams at primary

schools in Mikocheni and one in Chemchem were told that FTK would reward all A and B grades in the school at the end of the year during the final Standard 7 exams. The reward would benefit the teachers, as a group and individually, as teachers responsible for the better grades in their subject matter would benefit directly. This was the first time FTK tried an approach like this, the results at Ronga Primary School were simply spectacular, in the other schools the results were less pronounced, but the program will continue in 2017 now that these schools have experienced it for one year and have seen that the actual results were indeed rewarded with small cash payments.



*The Sahiwal Bulls for the livestock center enjoying the grass on the edge of the TPC estate.*



## Chemchem Village Project

In 2015 Chemchem village became FTK's third partner village, a baseline survey was conducted to provide input into the design of project interventions and to facilitate the introduction of FTK to the community. 2016 then saw the first activities being introduced, including the introduction of school lunches at the primary school after the parents constructed a school kitchen, the introduction of a small-business loan program and health care services provided by the new Mama Bus (which we discuss in some detail below). The collaboration between Chemchem, the village Project Committee and FTK staff is very positive.

### The Bridge

From the baseline survey we learned that by far the biggest perceived problem was the absence of a safe-crossing of the river that splits the village in two along a north-south divide. About 80% of survey respondents identified the lack of a bridge as a major problem. The absence of a bridge has many obvious and less obvious consequences: Access to health care facilities like TPC Hospital in case of emergencies is severely hampered; Farmers south of the river receive lower prices for their products due to higher transportation costs incurred by the buyers; government workers and police officers struggle to access the southern section of the village; and the community is practically split into two, making it harder to gather and form as a community.



*From the dugout and hoping for a safe crossing, to the bridge today.*

It was therefore not a difficult decision to seek out available options for the construction of a bridge, even though it was clear that the cost of such a project could be problematic. Following consultation with TPC and researching construction designs from bridges built in Marangu (in Kilimanjaro) it was determined that TPC could build a pedestrian bridge that could also handle bikes and motorcycles. Construction was finished at the end of the year and officially opened in February 2017. The bridge is already making a big difference in the lives of many Chemchem villagers.

## Lower Moshi

FTK's Lower Moshi program aims to work in harmony with the village projects by providing services and programs that are more easily coordinated across the region, such as various funding programs like the two we briefly highlight below, FTK's single mothers program and the scholarship program. Other initiatives naturally have a reach that goes beyond one village, like the school bus program we have highlighted in the past, FTK's road construction and maintenance program that is implemented in partnership with founding partner TPC and the new health care initiative the Mama Bus, which we also describe below.

## Single Mothers

Every year FTK supports around two dozen single mothers from Lower Moshi. In partnership with our longstanding partner Mama International FTK staff selects recipients of the micro-grants that are typically provided to women who alone are responsible for their children, and not rarely these women have also taken on responsibility for children not their own. The women provide a simple proposal for an income generating activity that they would like to start or expand. A second grant in the second year is often provided if the need remains clear and the recipient has followed through on her intentions. This year 10 new recipients were selected with the support of Mama International, in addition 3 new recipients were selected for sponsorship by a new partner, Justus. Another 15 mothers received a second grant in 2016 following their initial selection into the program in 2015. All women were welcomed to an entrepreneurship training conducted by the FTK staff. After the training the mothers were given capital to finance their business ideas.

## Scholarship Program

FTK's goal for our education program is to increase access and utilization of quality pre-primary, primary and secondary education and developing options for vocational and adult education.



*Magreth Zephania, who received a scholarship from FTK and now works at TPC Hospital as nursing assistant.*

Alongside many other activities in support of this goal FTK has established a Scholarship Fund to increase access to post primary education by providing scholarships for vocational training, secondary education, college studies and university to students from the Lower Moshi area. Any given year close to eighty students are benefiting from a full or partial scholarship to enable them to pursue their dreams. In 2016 35 new scholarships were awarded, this on top of the continuation of 40 multi-year scholarships that had been awarded in previous years. New scholarships were awarded to students in Secondary Schools (4 scholarships), in Vocational Training (14), in College and University (14), 3 scholarships were awarded for a variety of special educational needs.

### **The Mama Bus**

The Mama Bus is a new initiative that was introduced in 2016 by FTK in partnership with TPC Hospital and Suus Theuus. Suus first visited FTK in 2013 as a volunteer and saw the need for a mobile health care service focused on giving women in remote communities access to pre- and post-natal care. The goal for the Mama Bus is to directly contribute to lowering mother and child mortality during the first 1,000 days of a child's life. She developed the concept for the Mama Bus and in partnership with FTK and TPC Hospital worked towards a model where the service is basically an integral part of the Hospital's outreach program. The Mama Bus, a locally converted Toyota Noah (re-designed by FTK staff and built by a team from the Karanga Vocational Center in Moshi), made its first trip to one of the villages in Lower Moshi at the end of August and currently visits all four villages that FTK works with directly on a bi-weekly basis. Already the Mama Bus is considered a success, and not unlikely, seen as essential component of the health care services for families in Lower Moshi. Just during the first 40 trips this year to Mtakuja, Mserikia, Mikocheni and Chemchem, about 425 babies were brought to the Mama Bus for a check-up by the TPC Hospital nurse, during that first cycle of visits, she also saw more than 50 pregnant women. The numbers were still a surprise, but immediately confirmed the importance of the service. As we have seen in the past when we expanded the reach of critical services, like FTK has done with annual medical camps in the villages for instance, these new services become an important pathway to reach persons in desperate need and pull them into the care system. The Mama Bus visits have directly led to identification of numerous persons dealing with challenging health situations, who are now receiving better care. This includes people living with HIV/AIDS.

The Mama Bus launch in 2016 was a success and we look forward to seeing the Bus establish herself as an important beacon of hope in the communities of Lower Moshi in 2017.



## Looking ahead to 2017

### Londoto – The fourth village

In 2016 FTK conducted its typical pre-selection assessment of a few villages in Lower Moshi to help us in the determination of the village for the fourth village project. In the end Londoto village was selected as FTK's partner for the fourth village project. Londoto was until recently part of Msitu wa Tembo village, but this village was, like others in the region, split into two because of the size of the community. The inclusion of Londoto opens a new chapter for FTK, while Londoto is considered a geographic part of Lower Moshi, it is located in a neighboring district, Simanjiro, and even a different region, Manyara. FTK's current focus was exclusively on villages in Moshi Rural District, which is part of the Kilimanjaro Region. This geographic expansion means that FTK will in the coming years need to develop a relationship with a new lower governmental authority.



*Picture taken following the official kick-off meeting between FTK Staff and Londoto leadership.*

The village project leader, an FTK staff member, was recruited from within, Frank Mihayo, he has been working with the MDO and the farm team and will slowly transition in 2017 and 2018 towards a focus on Londoto village. 2017 will be for Londoto FTK's typical "null year", a year in which we get to know the village leadership, engage the community and conduct our baseline survey. As a sign of FTK's ever evolving approach, we are looking into incorporating community engagement approaches from one of FEMI's other partners, Pachyamama Raimi (PR) during this early stage of the Londoto project. PR focuses on engaging the community through competitions and emphasizing household level activities that individual households can choose to participate in. This approach seeks to emphasize personal initiative and aims to mobilize as many individuals as possible in the short term.

### Tablet assisted teaching

In 2016 we took the first steps in partnership with Digital Education Africa Network (DEAN) to introduce tablets in three public primary schools in Lower Moshi. Logistically this proved to be a challenging undertaking, but by the fourth quarter, teachers at each school were receiving regular

training on the use of the tablets. Now pupils are using the tablets in their math classes and the feedback, still mostly anecdotal, is very positive. Aside from helping teachers teach and pupils learn, the tablets are making teaching and learning more fun too. This positive reception was expected, but still needed to be proven out.



With the initial implementation challenges out of the way, FTK and DEAN will remain focused on the three schools currently participating in the program, but we will add subjects that can be covered using the tablets, the goal is to ultimately focus on the STEM subjects, Science, Technology, English and Math. A start will be made in 2017. Further feedback will be collected from teachers and students in 2017, and training sessions will continue to include Ward and District level education leaders, as the goal is to assure that our insights can be applied elsewhere and that we lay the groundwork for expansion of DEAN's approach to other schools, in Lower Moshi and beyond.

### **SimGas / Biogas initiative**

After a good experience with biogas in combination with new school toilets at Mserikia Primary School, we concluded that this is something we should try to expand and introduce to more schools in Lower Moshi.

At Mserikia Primary school the pupils no longer have to bring firewood to school. This saves trees and prevents much CO<sup>2</sup> emissions because firewood cooking is greatly decreased. At the same time the school cook is no longer be affected by smoke.

In SimGas we have found a partner that wishes to promote institutional Biogas through making sanitation systems available and install them. SimGas is a Tanzanian company with Dutch founders and is willing to share the cost with FTK in this project. They have been working in Tanzania and Kenya since 2013. They have already sold over 500 biogas installations for cow manure and they are looking at institutional biogas since 2015. They have constructed 4 of these of which one at a school in Moshi which is used daily.



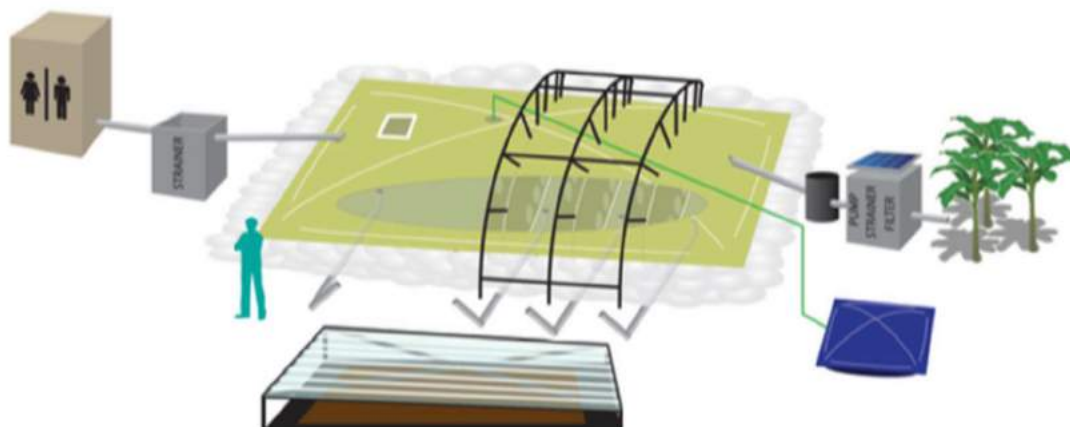
A first SimGas system has been built at Ronga Primary school as a pilot and we have had good results. The system was built in a deep pit making it very durable. The gas is trapped in a strong plastic container and transported through pipes to the kitchen. A school with 400 children can produce 2 m<sup>3</sup> of gas per day, sufficient for about 4 hours of cooking. Adding cow manure, kitchen waste and other substance can greatly increase the production of gas. When needed filter mud from the TPC factory can be added.



FTK and SimGas have decided to scale the program to include 27 government schools in Lower Moshi. This will be a major initiative in 2017.

The benefits of the energy-sanitation system are:

1. Sanitizing all the toilet waste minimizing harmful discharge of pathogens into the environment
2. Biogas production of 1 – 3 m<sup>3</sup> per day can be used for cooking in the school kitchen.
3. Potent wastewater is suitable for garden irrigation.
4. Quarterly solid waste sludge from the sanitation system is dried for fertilizer use. ☒



History has taught that sanitation systems are only durable when maintenance is integrated into the project. This is why our agreement with SimGas includes a maintenance contract for the installation to be built in Lower Moshi. The maintenance will be offered in return for the dried solid waste sludge produced by the systems. This dried waste is sold by SimGas as fertilizer to horticulture companies. This allows them to cover transport and wages for their technician to come to the schools every quarter and do maintenance and conduct training.

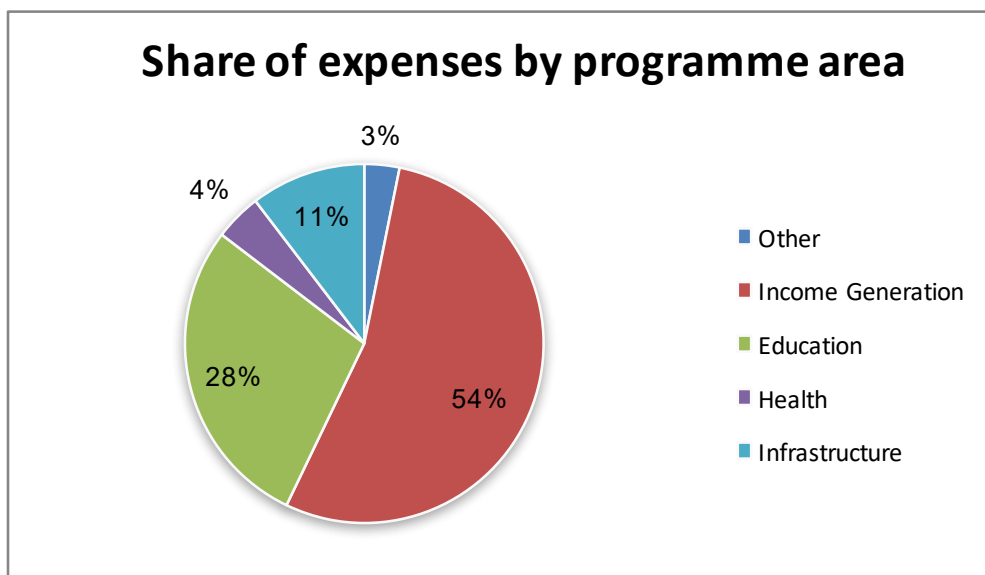
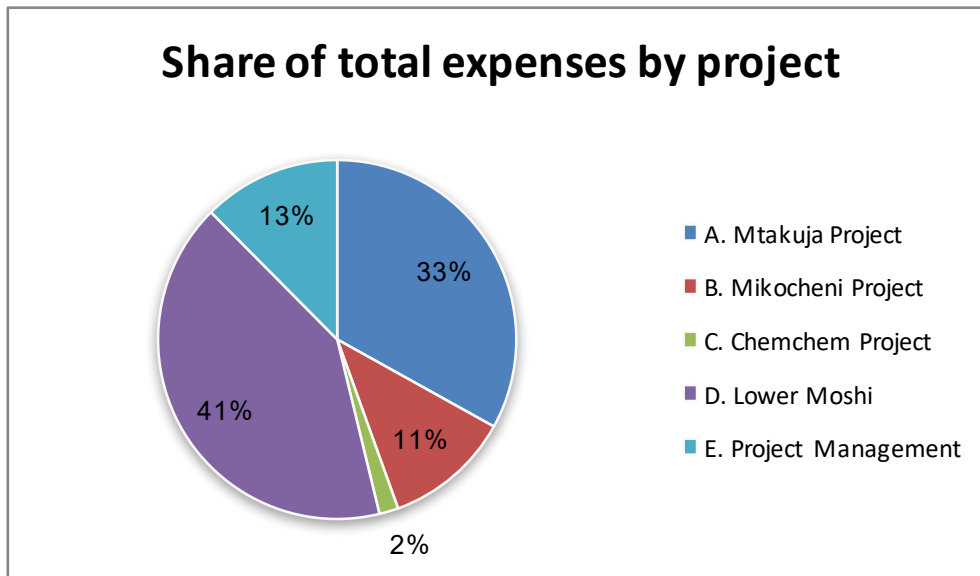
## Remiti Farm

Inspired by the Mtakuja/Mserikia farm, the Maasai of Remiti, a sub-village for Mserikia have started farming 24 acres of their own land. This land was previously earmarked for grazing purposes, but the community decided that farming was more beneficial. They have big plans to expand their farming activities in 2017. They took a loan from FTK to buy a second pump to irrigate the plots from a shallow well they dug by hand. This initiative is a wonderful example of the diffusion of innovation through peer learning.



## Finances

FTK's total expenses in Tanzania for the year were Tsh. 1,473,750,000 (equivalent to approximately €647,000). Total program expenses were Tsh. 1,290,360,000 (equivalent to approximately €566,000).



## Thank You

As we have described in the previous pages, much of our work is dependent on the efforts, vision and commitments from others. We want to thank everyone and every organization who has supported us in 2016 and the years before. Without their support our work would not be possible.

Thank you.

### In 2016 we received funding support from:

Stichting FEMI || TPC Company || HAM Foundation || Evert de Blok Beheer || Mama International || Zero-Kap Foundation || Net4Kids || Reborgh Foundation || Global Bike || Rotary Club Soest/Baarn & Ahlen || Running for Mtakuja || American Jewish World Service || Stichting Join the Pipe || Justus de Jong || Carpe Diem

### In 2016 we collaborated with:

Affordable Computers and Technology for Tanzania (ACTT) || AfricAid || African Vegetables Company || Aquatech || C-Re-Aid || Daraja ensemble / Clarinets 4 Conservation || Buffalo Bus Company || CCBRT || Childreach Tanzania || DEAN / Viafrica || Delft University of Technology || Gabriella Centre || GCS || Government of the United Republic of Tanzania || HakiKazi Catalyst || Karanga Technical Training institute || Kilimanjaro Water Stewardship Council || Medical Checks for Children || More Than A Drop || Moshi Rural District || Suus – Driving nurses || Tatu Project || TPC Company & TPC Hospital || University College Utrecht (UCU) || Wade Rain/Puralytics || Maryland Clinic || SimGas || Young Professionals Overseas (YPO) || Zuyd University of Applied Sciences