



# Socio-Economic Impact of Kilombero Valley Teak Company

---

## **Final Report**

Finnfund

Date: 12<sup>th</sup> June 2023

## Executive Summary

### Introduction

NIRAS Finland Oy (NIRAS) was contracted by the Finnish Fund for Industrial Cooperation Ltd (Finnfund) to undertake a socio-economic impact study of the Kilombero Valley Teak Company (KVTC). The study was conducted over four months between the 5th of January 2023 and the 28th of April 2023 with field data collection was from 7th to 15th of March. The main objective of the study was to assess if the livelihoods and well-being have improved in KVTC areas and especially among KVTC's direct stakeholders particularly employees and out-growers, but also contractors' workers, villages and local government. A specific emphasis will be put on assessing KVTC's possible impact on women's livelihoods. The study was expected to identify the main contributing factors to the improvement (or lack of improvement).

The KVTC is a Tanzanian Limited Liability Company and was incorporated in 2012. The company primarily engages in producing sawlogs and processing sawn timber and value-added products that are traded in both export and domestic markets. KVTC is Africa's largest private teak company and the largest exporter of wood products in Tanzania. The company is owned by Socially and Environmentally Responsible Investors: the Africa Sustainable Forestry Fund (ASFF) and Finnish Fund for Industrial Cooperation Ltd (Finnfund). ASFF is managed by Criterion Africa Partners, the largest private investor in Africa's sustainable forestry sector.

### Objective of the study

The main objective of this study was to assess if the livelihoods and wellbeing have improved in KVTC areas and especially among KVTC's direct stakeholders, particularly employees, and out-growers, but also contractors' workers, villages, and local government. A specific emphasis was put on assessing KVTC's possible impact on women's livelihoods. The study was expected to identify the main contributing factors to the improvement (or lack of improvement) and was expected to provide evidence to attribute some improvement (or lack of it) to KVTC.

### Methodology of the study

The study collected qualitative and quantitative data from KVTC's direct stakeholders. The team conducted a survey with 78 KVTC Employees, 48 Contractors' workers, and 130 Out growers' households. The team conducted 14 Key Informant Interviews with officials at three districts where KVTC has its operation and plantations (Mlimba, Ulanga, and Malinyi ) and KVTC management. The structured interviews were conducted with 8 institutions (schools and health centre) that have received support from KVTC. In addition, the team conducted 6 Focused Group Discussions with representatives of the Village Council in the sampled villages under the Out Growers Support Program (OSP).

A mixed method of Most Significant Change (MSC) and Contribution Analysis (CA) was applied to assess the livelihood assets and vulnerability. These methods aimed to determine whether the KVTC has contributed to improving the livelihood assets of KVTC's direct stakeholders and local communities in the target area, and if it can be demonstrated that the improved well-being is occurring as a result of KVTC's contribution. The Poverty Probability Index (PPI) was used to compare a household's income to the minimum amount of income needed to meet the household's basic needs. The Household's income that falls under the minimum amount is considered poor. It is an indication of the intensity of poverty in the community. This estimate (usually in percentage) enabled the consultant team to provide an overall assessment of the community and workers' progress in poverty reduction through KVTC activities.

## Has the livelihoods and wellbeing among KVTC's direct stakeholders improved and can it be attributed to KVTC?

- ❖ KVTC Employees: The main source of income for the employees is from KVTC employment (wages and salaries) from KVTC. Other sources are farming and selling of livestock products. Farming was the main income-generating activity before being employed by KVTC. However, currently, dependency on farming by females and males is reduced by about 14% and 23% by females and males respectively.
- ❖ There is an increase in the average monthly household income from all sources: TZS 585,208 (Euro 230) for females and TZS 474,762 (Euro 186) for males. This is a very significant increase compared to the average income before employment with KVTC which was 192,690 TZS (Euro 76) for females and TZS 170,966 (Euro 67) for males. The main earning is from the KVTC employment salaries and wages.
- ❖ Since being employed by the KVTC, the employees have reported having been able to increase their assets (40% of employees have been able to build a house), and bought household assets such as television, radio, furniture, bicycle, etc. Also have increased access to improved sources of lighting and cooking, sources of water, and increased food security. Use of electricity and solar have increased leading to a positive impact on the environment.
- ❖ The improvement in employees' livelihood and wellbeing is directly attributed to KVTC. There are activities and staff benefits that are being implemented and had significant positive impacts on the employees: including the provision of breakfast and lunch through the canteen, reviewed meal allowances of workers in the field, medical cover to senior staff, access to KVTC dispensary and sundry sales from offcuts solve workers problems which they cannot manage with salaries.,
- ❖ KVTC has had an impact on the increase in employee use of bank accounts. All KVTC employees have bank accounts either with NMB or CRDB Bank. It is a requirement at KVTC that every employee must have a bank account because salaries and wages are paid directly via each employee's bank account.
- ❖ Mitiki SACCOS provides loans to members ranging from small loans for school fees and agricultural inputs to larger loans for house construction as well as the purchase of farming tools and equipment. However, a small percentage (4%) of employees in the sample indicated to be members of SACCOS. They are not able to register and become a member of Mitiki SACCOS because the entrance amount is high (TZS 500,000, equivalent to Euro 196).

## Contractors' workers

- ❖ There is a high level of casualization of the workforce in most of the contractual work. At least 29 and 80% of female and male workers respectively of our sample were found to be employed on a temporary or casual basis. Some of them reported working as casual workers with the same contractor for many years. Casual employment status is not recognised by the Employment and Labour Relations Act, of 2004, it does, however, recognize fixed-term contracts for employees (limited by a specific task or time). Although this is not a direct issue of KVTC it poses a reputation risk.



- ❖ There is an increase in income compared to before they started working with KVTC contractors. Casual employment from KVTC contractors is mentioned as one important source of income alongside farming, and the business of agricultural products. The majority of the contractor's employees (66% for Females and 50% for males) have reported that the overall wellbeing of their household has improved in terms of the ability to meet family needs such as afford meals and pay for the education of their children.
- ❖ There are various welfare facilities provided by the contractor and KVTC to all workers (including contractors' workers). The facilities include water, a fully equipped dispensary, and sanitary facilities (toilets, showers, and changing rooms). The facilities are available and accessible to casual and permanent employees.
- ❖ There is increased access to improved sources of energy for cooking and electricity for lighting as compared to the situation in the past 10 years. The use of firewood for cooking has decreased from 46% in 2012 to about 27% now. Firewood as an energy source for cooking is in the category of inferior goods.

### **Households under Out grower Support Programme**

- ❖ The livelihood and wellbeing of out growers' households have improved. The household average income has increased, although the gender income gap is larger now compared to the year 2012. Female-headed households did not have access to diverse sources of livelihood compared to male respondents who reported diversity in sources of livelihood in addition to agriculture. Casual labour, small business, and livestock activities were mentioned as additional sources of income. The overall increase in prices of goods has had a negative impact on households.
- ❖ The increase in income is not yet attributed to KVTC. The out growers' teak trees are not yet mature. The teak takes a minimum of 15 years to mature. Once they will start to harvest the trees the out growers are guaranteed a market for the logs OSP by KVTC, and according to the new OSP model, the growers are free to sell all their logs to the highest bidder.

### **KVTC's Impact on the Community**

- ❖ There is a vertical and horizontal adaptation of the technologies for teak planting and tending. There are many households that are not in the OSP but have planted teaks. Some individuals make an income by selling seedlings to other people. This provides indications that KVTC is enabling the accumulation of livelihoods. Generally, there is an increase in natural capital in villages as a result of increasing Teak woodlots.
- ❖ There is an indication of the accumulation of human capital as a result of KVTC. The company enables the acquisition of new skills and knowledge relating to different livelihood activities example teak production and forest economic opportunities

- ❖ Physical capital is increasing through the KVTC Social Fund and Village Contract which is used for the construction of classrooms, and teachers' offices have had an increase in learning outcomes. The maintenance or minor construction of roads and the construction of boreholes are mentioned by respondents to have improved access to clean water and reduced the burden of women to walk long distances to fetch water. There is evidence that some improvement in health outcomes, and the availability and access to drinking water can be partly attributed to KVTC through their social fund and Village Contract. In 2022, KVTC and its communities implemented several projects worth TZS 226 million (about Euro 88791) of which KVTC's Social Fund contributed 32 %. The district officials at Malinyi and Ulanga acknowledge that KVTC is one of the main investors in their districts. They contribute to the revenue of the district through service levies.
- ❖ KVTC's role in enhancing the health sector was observed and acknowledged during the discussions with officials and the community. Building the health centre improved the environment at the hospital and the health of women.
- ❖ The majority of communities from Mavimba and other neighbouring villages have benefited from collecting offcuts that KVTC used to burn. Many people use offcuts for construction, fencing, and making furniture. This helps to improve the livelihood of the people

### Poverty analysis

On average, poverty indices indicate that about 14% of KVTC employees, 37% of contractors' workers, and 37% of OSP households fall below the poverty line. The Tanzania poverty level presented by the Household Budget Survey was 28.2% in 2011/12 and 26.4% in 2017/18.

Analysis of the poverty index by gender revealed that there are higher percentages of females in all stakeholders (KVTC employees, OSP households, and contractors) that fall below the poverty line compared to males. Some of the main barriers to women's progress out of poverty in Tanzania are low education; low asset accumulation and low access to financial services. For those engaging in business, difficult legal and regulatory frameworks and lack of access to business development services limit them to generate enough profit margins.

The poverty profile generated results that suggest that KVTC's interventions and activities that focus on female key stakeholders would create more impacts on poverty reduction

## Conclusions

The livelihood of KVTC employees, KVTC contractors' workers, Out growers' households, and the wider community have been impacted positively by KVTC. It has contributed to the increase of livelihood assets. KVTC is influencing some cultural practices in communities where they work with positive results such as providing employment to women in positions that were initially assumed that only men can do, increase in school enrolment and improvement of learning outcomes.

KVTC's impacts on women's livelihoods have been positive. Over the past 10 years, the company has increased the number of female employees from 16 employees (in 2012) to 63 (2022), as well as, providing opportunities and additional skills for women to take on positions that are assumed that can only be done by male. The investment through Social funds and village contracts to construct boreholes and the health centre for reproductive health and vaccination have had a positive impact on women who are using these services.

Despite the investment provided, there is a very high perception that KVTC should solve 'all' communities' problems. Many do not appreciate that KVTC is doing business. There is a need to manage expectations.

## Recommendations

- ❖ Most of the KVTC workforce is young (below 45) and their needs and demand are increasing as they age. KVTC could support employees to access other financial facilities apart from the monthly salary;
- ❖ Mitiki SACCOS is increasing in assets and capital, some employees are not able to register and benefit. More training on how the SACCOS is operating and encouraging employees of all levels to join.
- ❖ To solve the problem of some households sleeping without food, training on household budget setting and management especially on how to set financial goals and save-up for them to ensure costs of basic needs are met until another wage or salary is received.
- ❖ Invest in Income Generating Activities (IGAs) in the old and new models of OSP. This will guarantee the availability of the intermediate incomes as they are waiting for the teak to mature. The IGAs in beekeeping and mushroom projects which KVTC is already preparing for will be very important to Out growers, particularly for female-headed households.
- ❖ Continue to increase awareness using various channels of communications on how the KVTC is working to ensure that it wants to be part of local community DNA. Communication messages on the science part of teak may not reduce the hostility of the OSP households in villages where KVTC does not have social fund projects such as Sululu, Signalali, and Kiberege. The messages should focus on mitigation of over expectations raised in the past and growth mindset changes towards teaks.
- ❖ Support contractor compliance with labour laws and staff benefits. KVTC should consider the use of Occupational Health and Safety Authority (OSHA) reports in monitoring to enhance compliance. This will minimise future reputation risks.

## Acronyms

<b>ASFF</b>	Africa Sustainable Forestry Fund
<b>CA</b>	Contribution Analysis
<b>CCM</b>	Chama cha Mapinduzi
<b>CSR</b>	Corporate social responsibility
<b>DC</b>	District Commissioner
<b>DED</b>	District Executive Director
<b>DFI</b>	Development Financial institution
<b>DFO</b>	District Forest Officer
<b>FGD</b>	Focus Group Discussion
<b>Finnfund</b>	Finnish Fund for Industrial Cooperation Ltd
<b>KII</b>	Key Informant Interview
<b>KVTC</b>	Kilombero Valley Teak Company
<b>MoU</b>	Memorandum of Understanding
<b>MSC</b>	Most Significant Change
<b>NIRAS</b>	NIRAS Finland Oy
<b>ODK</b>	Open Data Kit
<b>OSP</b>	Out growers Support Program
<b>PFP</b>	Private Plantation Forest
<b>PPI</b>	Poverty Probability Index
<b>QMS</b>	Quality management system
<b>SACCOS</b>	Saving, and Credit Cooperative Society
<b>SPSS</b>	Statistical Package for Social Sciences
<b>ToC</b>	Theory of Change
<b>ToR</b>	Terms of Reference
<b>TPAWU</b>	Tanzania Plantation and Agricultural Workers Union
<b>VA</b>	Village Assembly
<b>VC</b>	Village Council
<b>VICOBA</b>	Village Community Banking

# Contents

<b>Executive Summary .....</b>	<b>2</b>
<b>1. Introduction .....</b>	<b>10</b>
1.1. Kilombero Valley Teak Company .....	10
1.2. Study Area .....	13
1.3. Objective of the study .....	14
1.4. Scope and Timing of the study .....	14
<b>2. Methodology.....</b>	<b>15</b>
2.1. Study design.....	15
2.2. Sampling .....	15
2.3. Survey tool design .....	15
2.4. Data collection.....	15
2.5. Data entry, cleaning, and analysis.....	17
2.6. Limitations of the study .....	18
<b>3. Findings KVTC Employees .....</b>	<b>19</b>
3.1. Demographic:.....	19
3.2. Household welfare analysis .....	21
3.3. Food security .....	25
3.4. Access to water and healthcare .....	26
3.5. Access to financial and telecommunication services .....	28
3.6. Security .....	30
<b>4. Impacts on Households Under Out grower Support Programme .....</b>	<b>32</b>
4.1. Demographic.....	32
4.2. Household welfare analysis .....	32
4.3. Water .....	35
4.4. Food security.....	36
4.5. Improvement in wellbeing .....	36
4.6. Livelihood assets.....	37



4.7.	Access to telecommunication and financial services .....	38
4.8.	Security .....	39
<b>5.</b>	<b>Impacts on Contractor’s Employees .....</b>	<b>40</b>
5.1.	Gender and age.....	40
5.2.	Education and employment status.....	40
5.3.	Contractors’ Workers’ Incomes and Welfare Analysis .....	42
5.4.	Food security .....	44
5.5.	Health.....	45
5.6.	Access to Water.....	45
5.7.	Security issues.....	46
<b>6.</b>	<b>Poverty analysis .....</b>	<b>47</b>
<b>7.</b>	<b>Discussion .....</b>	<b>49</b>
7.1.	What are the impacts of the KVTC on the well-being of the employees? .....	49
7.2.	What is the impact of KVTC on Out grower’s .....	50
7.3.	On Contractors’ workers.....	50
7.4.	What are the benefits of the KVTC to the wider community? .....	51
7.5.	What is the KVTC impact on women’s livelihoods.....	53
<b>8.</b>	<b>Conclusion and Recommendations .....</b>	<b>55</b>
<b>9.</b>	<b>Annex .....</b>	<b>56</b>

## 1. Introduction

NIRAS Finland Oy (NIRAS) was contracted by the Finnish Fund for Industrial Cooperation Ltd (Finnfund) to undertake a socio-economic impact study of the Kilombero Valley Teak Company (KVTC). The study was conducted over four months between the 5<sup>th</sup> of January and the 28<sup>th</sup> of April 2023 with field data collection between the 7<sup>th</sup> and 15<sup>th</sup> of March 2023.

### 1.1. Kilombero Valley Teak Company

KVTC is a Tanzanian Limited Liability Company and was incorporated in 2012. The company primarily engages in the production of sawlogs for sale and its processing of sawn timber and value-added products that are sold in both export and domestic markets. KVTC is Africa's largest private teak company and the largest exporter of wood products in Tanzania. The company is owned by Socially and Environmentally Responsible Investors: the Africa Sustainable Forestry Fund (ASFF) and Finnish Fund for Industrial Cooperation Ltd (Finnfund). ASFF is managed by Criterion Africa Partners, the largest private investor in Africa's sustainable forestry sector.

KVTC manages 28,000 ha of land divided into 4 blocks: Ichima, Narubungo, Nakafulu, and Mafinji. About 30% of the total land is dedicated to sustainable forestry: 8,000 ha planted with teak. Approximately 70% is under active conservation (16,000 ha of natural forests and 4,000 ha of grasslands and wetlands). KVTC subscribes to FSC principles and is audited each year to ensure that its forest operations are sustainably managed and a balance between socio-economics and the environment is realised. It is however not FSC certified. The company brings a wide range of long-term social, economic, and environmental benefits to the Kilombero valley, it works with surrounding communities and (local) government, and serves as a model for responsible forestry in sub-Saharan Africa.

#### Employment

KVTC is the largest private formal employer in the Ulanga district and is operated almost entirely by Tanzanians. It brings employment opportunities and skills training to the place where the main source of income is rice farming at the subsistence level. The company provides full-time employment to 300 people, many of whom come from the surrounding region. In addition, contractors employed between 250 and 350 people depending on the time of the year. The contractors undertake various activities including silviculture, harvesting, and transportation.

#### The Out Grower Support Program

The Out-grower Support Programme (OSP) has 650 participants who have established nearly 1,200 ha of teak. KVTC aims to support the establishment of at least 2,000 ha through this program. Since 2010 KVTC and partly Participatory Plantation Forestry Programme (PPF)<sup>1</sup> has invested more than USD1 million (Euro 934,320) in the OSP program. The overall objective of the OSP is to reduce poverty by establishing plantations that contribute effectively and sustainably to improving the lives of the community whilst at the same time offering alternatives to more environmentally destructive manners of generating income, i.e., illegal logging, poaching, and/or charcoal production.

---

<sup>1</sup> PPF is a bilateral development cooperation programme between the governments of Tanzania and Finland. The total budget of the Government of Finland for the programme is EUR 9,340,000. The budget of the Government of Tanzania is EUR 470,000. This money is provided as an "in-kind" contribution.

There are currently two models of the OSP program. The first model has both corporate social responsibility (CSR) and financial support, it started in 2008 to 2020. In this old model, beneficiaries would provide suitable land for the teak and KVTC would provide free planting materials, the cost of managing the teak for the first 8 years would share 50/50 between KVTC and the beneficiary. The harvests from the compartment would be shared by 80% to the beneficiary and 20% to KVTC.

The second model (new model) started in 2021, this is through Corporate social responsibility (CSR). The beneficiaries would provide suitable land to plant teak, KCTV would provide free planting material and extension services on how to manage the woodlots/plantation, and the beneficiary will incur 100% of the management cost and 100% of the harvest. KVTC does not stake in ownership but remains an open market. Table 1.1 shows the number of households under OSP.

Table 1.1: Total number of households/institutions under OSP

OSP Old model	District	Ha	Male	Female	Institution	Participants
	Kilombero	264	166	23	-	189
	Malinyi	77	32	4	4	40
	Ulanga	411	161	24	15	200
	Mlimba	250	122	14	6	142
	Total	1,002	481	65	25	571
OSP New model	Kilombero	25	12	2	-	14
	Malinyi	11	8	-	-	8
	Ulanga	32	19	2	1	22
	Mlimba	11	9	2	-	11
	Total	78	48	6	1	55
Total KVTC OSP		156	96	12	2	110

Table 1.2: Statistics and trend of KVTC support (in TZS) through OSP

Name of the District	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Kilombero	20,418,469	34,917,801	40,835,965	50,819,083	74,873,843	56,479,307	20,617,695	7,210,910	195,264	302,203
Malinyi	1,652,718	4,267,781	3,531,615	3,296,339	10,918,630	9,603,515	13,068,715	11,799,381	7,297,152	1,814,943
Mlimba	8,866,549	19,398,210	20,638,175	26,600,065	55,810,957	46,293,768	89,711,820	26,245,500	1,859,412	2,745,329
Ulanga	28,878,581	41,568,979	63,873,412	52,179,604	48,848,450	66,144,276	42,286,632	42,676,342	7,402,477	6,174,858
<b>Total</b>	<b>59,818,339</b>	<b>100,154,792</b>	<b>128,881,187</b>	<b>132,897,110</b>	<b>190,453,898</b>	<b>178,522,883</b>	<b>165,686,878</b>	<b>87,934,148</b>	<b>16,756,319</b>	<b>11,039,346</b>

N.B: 1 TZS equal to 0.00039 Euro (March 2023)<sup>2</sup>

## The Community

KVTC stretched into two districts which were Ulanga and Kilombero. However, in 2015 Ulanga district was split into two districts: Ulanga and Malinyi, and in 2019 Kilombero district was split into two districts: Kilombero and Mlimba. KVTC and the surrounding communities depend on each other. The communities depend on KVTC for jobs and local investment, while KVTC relies on the communities for the ‘social license to operate’, including helping the company to minimize risks such as fire, timber theft, and wildlife poaching. Long-term success for both parties depends on good relations between the two. KVTC seeks to strengthen this relationship through positive engagement and ongoing dialogue.

KVTC supports communities through community engagement. It hires locally, and trains and shops locally. KVTC hosts regular village seminars and a biweekly radio broadcast<sup>3</sup> to keep villagers informed of KVTC’s activities and issues that affect the environment. Through village contracts, out grower programme, and ongoing communication, KVTC strives to promote conservation and sustainable farming practices. KVTC also supports schools. Since 2017 KVTC Management has been organizing an essay or poem contest for all secondary schools in KVTC’s neighbouring villages.

## Social Fund

<sup>2</sup> Bank of Tanzania (BOT) [bot.go.tz/ExchangeRate/excRates](http://bot.go.tz/ExchangeRate/excRates)

<sup>3</sup> Pambazuko FM 89.5 Ifakara is Community radio run 18 hours deal with News and Entertainment

In villages in which KVTC got land, annually the company makes available a sum of money towards a selected community project in each of the 17 associated villages. Funds made available (KVTC contribution is Euro 30 000) through the social fund are deposited in a joint account (between village and KVTC) and are only released against an approved project. A village, through its Village Council (VC) and Village Assembly (VA), would propose a project and submit a proposal to KVTC. The proposal is scrutinised and assessed by KVTC before being approved. Through this arrangement in 2022, KVTC and its communities implemented several projects worth TZS 226 million (about Euro 88,791) of which KVTC's Social Fund contributed 32.1%. This includes the completion of two classrooms and a nursery school building at Idete village, two classrooms and the purchase of office plastic chairs at Idete B, completion of a classroom at Nakafulu primary school, and a double classroom and office block at Iragua village. Construction of the village government office at Kidugalo and one classroom at Ikungua village are at the roofing stage<sup>4</sup>

### **The Village contract**

KVTC engages its associated villages through Village Contracts. Under these contracts trained Game Scouts from surrounding villages assist with cleaning boundaries of KVTC land, carry out patrols to avoid illegal logging or poaching, and ensure that no land encroachment takes place. The Game Scouts also play an important role in monitoring and recording the movements of wildlife. The villages make available people that work together with KVTC staff in fighting or preventing fires in areas adjacent to their villages. Attached to the Village Contract is a bonus scheme whereby villagers are rewarded if incidents of illegal logging, poaching, or fire are prevented during a year. In 2022 KVTC paid out TZS 16.4 million (Euro 6,416) through the village bonus scheme. The annual village bonuses are paid through the village account. The village performances are discussed during field visits or the village consultative meetings.

### **Mitiki Workers' SACCOS**

KVTC's Workers' Saving and Credit Cooperative Society (SACCOS) was established in May 2001 to provide members with an opportunity to invest their savings and gain access to soft loans. Mitiki SACCOS provides loans to members ranging from small loans for school fees and agricultural inputs to larger loans for house construction as well as the purchase of farming implements. Membership to Mitiki SACCOS is voluntary and up to now has 107 active members. The members include KVTC employees, contractors, retired employees, housemaids based at KVTC, and SACCOS employees. At the end of 2022, SACCOS shares and reserves stood at 91 million and 166 million Tanzanian Shillings, respectively<sup>5</sup>.

## **1.2. Study Area**

The company operates a sawmill at Mavimba village and has plantations in the Ulanga, Malinyi, and Mlimba Districts of the Morogoro Region, Tanzania. Agriculture is the major economic activity in the Region. It engages about 80-90 percent of the region's labour force<sup>6</sup>. Agriculture involves both small and large-scale farmers. Small-scale farming includes subsistence farming, and cash crop production. Maize and paddy are the major staple food crops. Other food crops in the region include sorghum, sweet potatoes, beans, cassava, millet, groundnuts, tomatoes, fruits, and vegetables. The cash crops in the Region are onions, oil seeds (such as simsim, sunflower, and some cocoa along

---

<sup>4</sup> KVTC Environmental, Social & Governance Monitoring Report 2018-2022

<sup>5</sup> KVTC Environmental, Social Governance Monitoring Report 2018-2022

<sup>6</sup> Morogoro Region Socio-Economic Profile (2020). National Bureau of Statistics, Ministry of Finance and Planning and Morogoro Regional Secretariat at <https://morogoro.go.tz/storage/app/uploads/public/621/cc0/3de/621cc03deb0c6900103117.pdf>



the mountain slopes. Apart from farming, there is traditional fishing which is practiced along the Kilombero rivers. In the past ten years, both Malinyi and Ulanga have seen an increase in population. The favourable agricultural and livestock-keeping opportunities appear to be the main drivers of this change, as the population increased with more people migrating from different places to seek opportunities.

### **1.3. Objective of the study**

The main objective of this study was to assess if the livelihoods and well-being have improved in KVTC-affected areas and especially among KVTC's direct stakeholders, particularly employees, and out-growers, but also contractors and their employees, villages, and local government. A specific emphasis was put on assessing KVTC's possible impact on women's livelihoods. The study was expected to identify the main contributing factors to the improvement (or lack of improvement) and was also expected to provide evidence to attribute some improvement (or lack of it) to KVTC. The detailed Terms of Reference (ToRs) are in Annex 1.

### **1.4. Scope and Timing of the study**

The socio-economic impact study was conducted over four months between January 2023 and April 2023 with the field visit from the 7<sup>th</sup> to the 15<sup>th</sup> of March 2023. The study was implemented in two phases; Inception between January to February and Implementation from March to April. During the Inception phase, the NIRAS team held a kick-off meeting with the client (Finnfund) and a briefing meeting with KVTC management and developed the Inception Report with a proposed methodology for the study. In the implementation phase, the team conducted the field visit and developed the Final Report which was first submitted for comments on 20<sup>th</sup> of April. Comments from the FinnFund, KVTC, and Criterion Africa Partners were received, incorporated to produce this Final Report.

## 2. Methodology

### 2.1. Study design

A mixed methods approach comprising of Contribution Analysis, Most Significant Change (MSC), and Contribution Analysis to the livelihood assets and vulnerability. This methodology was used to determine whether the KVTC has contributed to improving the livelihood assets of KVTC's direct stakeholders and local communities in the target area and if it can be demonstrated that the improved well-being is occurring as a result of its contribution. The poverty index was used to compare a household's income to the minimum amount of income needed to meet the household's basic needs. This estimate (usually in percentage) enables the consultant team to provide an overall assessment of the community, KVTC Employees, and contractors' workers' progress in poverty reduction through KVTC activities.

### 2.2. Sampling

The sample of OSP households was selected to include those who were in the old model and the new model. To increase the number of female-headed households, the distribution of the sample between male-headed and female-headed households was purposefully decided to be 15% and 50% for male-headed and female-headed households respectively. To avoid bias and ensure representativeness, the samples were drawn randomly. The KVTC employees' categories were purposely selected from each category of employees, and then the sample was randomly drawn. Our random sample consisted of both skilled and semi-skilled employees from different departments. Semi-skilled are those that do not have advanced education or specialized skills and skilled employees comprised of technicians, and managers who have acquired university degrees, and college professional certifications. To ensure sufficient female respondents it was decided that 30% of the employees' sample should be women 10% of contractors' workers were selected randomly from the categories of the contractors: Construction, harvesting, silviculture, transportation, security services, cleaning and gardening, lumber waste, and offcuts removal, Diesel and petrol supply, canteen services, and bus services.

### 2.3. Survey tool design

The team finalised the data collection tools during the Inception phase. The tools comprised a structured questionnaire and checklists for key informant interviews (KII) and focus group discussion (FGD). The structured questionnaire included questions on household welfare analysis, food security, access to water, healthcare services and markets, and financial services (these are the critical measures of a household's well-being). The team recorded all their interviews. All the questionnaires were scripted in the Open Data Kit (ODK) with validation rules and skip patterns to minimise the chances of input error occurrences. Finally, at the end of each day once the team has reviewed the data it was uploaded from the tablets to a server to reduce the risks of loss and/or alteration.

### 2.4. Data collection

Data for the survey was collected using both quantitative and qualitative methods. A separate structured questionnaire was administered to employees of KVTC, KVTC contractors' workers, and Households under OSP. For qualitative data KIIs and FGDs were administered to selected stakeholders as in Table 2.1.

## Surveys

Data were collected over nine days between the 7<sup>th</sup> and 15<sup>th</sup> of March 2023.

Table 2.1 Sample stakeholders

Categories of responded	Total Sample	Female (%)	Male (%)
KVTC employees	78	36	64
KVTC Contractors' workers	48	12	88
OSP Households	130	24	76
Total	256		

## Key Informant Interviews

The team conducted 14 KIIs. The respondents were purposively selected based on their knowledge and experiences. KII guide was used to facilitate the discussions and ensure that similar information from the interviewees was collected.

Table 2.2 KIIs held during the field visit

Organisation/ institution	Title
Alabama village, Malinyi District	Chairman Alabama village
Alabama village, Malinyi District	Village Executive Officer (VEO)
Ulanga District	Deputy District Executive Director (DED)
Kichangani Primary School	Headteacher
Mlimba District	Ag. District Forest Officer (DFO) Mlimba
KVTC	Chief Executive Officer (CEO)
KVTC	Chairman of the Board
KVTC	Tanzania Plantation and Agricultural Workers Union (TPAWU) Chairperson for Women employees
KVTC	Chief Forest Manager
KVTC	Social Manager
Namawala	Chaman Cha Mapinduzi (CCM) secretary
KVTC	TPAWU Chairperson
Mlimba	DFO

## FGDs

A total of 6 Focused Group Discussions were held with representatives of the Village Council –(including men and women in the sampled village under OSP (both the old model and new model). The quantitative and qualitative data collected from the surveys and KIIs were triangulated with qualitative information gathered through the FGDs.

Table 2.3 FGD held during the field visit

Name of the Village	Female	Male
Nakafulu	3	4
Alabama	5	3
Iragua	3	3
Namawala	2	5
Sululu	3	5
Kiberege	5	7
Total	21	27

## 2.5. Data entry, cleaning, and analysis

Quantitative data were entered into the Statistical Package for Social Sciences (SPSS) for descriptive analysis while qualitative data was transcribed and summarised in an Excel worksheet based on the research questions, thematic and similar responses. The Most Significant Change was also captured and reported.

In this study, Poverty is defined as whether households or individuals possess enough resources or abilities to meet their current needs. The Simple Poverty Scorecard-brand poverty-assessment tool uses ten low-cost indicators from Tanzania’s 2011/12 Household Budget Survey to estimate the likelihood that a household (in this case KVTC employees, KVTC contractors’ workers, and OSP households) has consumption below a given poverty line (Schreiner, 2016)<sup>7</sup>.

Progress out of Poverty Index (PPI) was used to estimate Progress out of Poverty Index (PPI) several indicators were used to create a scorecard for the KVTC employees, Contractor’s workers, and OSP households. The poverty indicators used were:

- How many household members are 18 years old or younger?
- Are all household members ages 6 to 18 currently in school?
- What is the main building material used for the walls used by the household?
- What is the main building material used for the roof?
- What is the main fuel used for cooking?
- What is the main fuel used for lighting?
- Does your household have any lanterns?
- Does your household have any tables?
- If the household cultivated any crops in the last 12 months.
- Does your household currently own livestock?

<sup>7</sup> Schreiner (2016). Simple Poverty Scorecard® Poverty-Assessment Tool Tanzania, [https://www.simplepovertyscorecard.com/TZA\\_2011\\_ENG.pdf](https://www.simplepovertyscorecard.com/TZA_2011_ENG.pdf)

Simple Poverty Scorecard® Poverty-Assessment Tool (freely available and easily accessible at [www.progressoutofpoverty.org](http://www.progressoutofpoverty.org)) was used to generate a scorecard. The scores were converted to poverty likelihoods using a conversion table with a poverty likelihood of 100% poverty line (Annex 7a&b).

## **2.6. Limitations of the study**

No study is completely flawless or inclusive of all possible aspects. The finding of this study is based on the direct stakeholders of KVTC and cannot be used to make generalisations across the wider population in the project area (particularly the household-level incomes). If more resources could be obtained, particularly time to access a larger sample size could have impacted or influenced the interpretation of the findings from this study. However, the consultants obtained excellent statistics from KVTC, and with our strong study design, we believe that the biases that could be realised due to the study limitations were minimised.

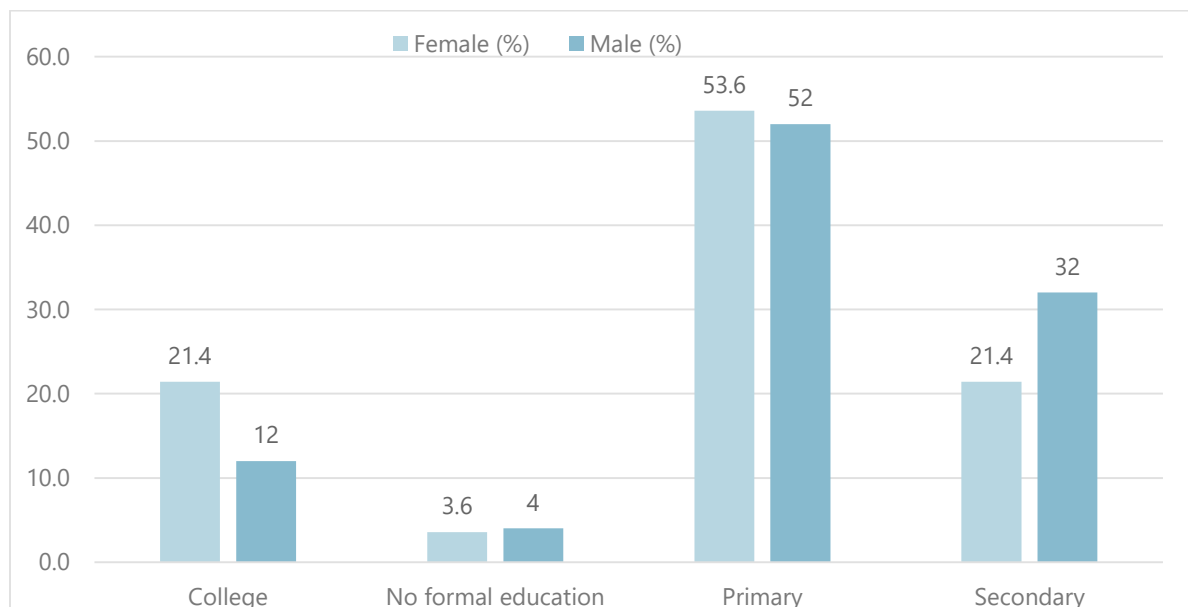


### 3. Findings KVTC Employees

#### 3.1. Demographic: Education

Half of the employees in our sample had primary education. Secondary second is most common, and many females had secondary and college education, and very few with no formal education. Our findings show that 4% (female) and 4% of male employees had no formal education 33% have college-level education which includes a diploma or university degree as shown in Figure 3.1.

Figure 3.1 Employees' Level of Education by Gender



In Tanzania, about 78% of the population aged 15 years and above are literate (i.e. can read and write with an understanding of a short simple sentence in everyday life). Literacy is high among males (83%) as compared to females (73%). However, Gender Parity Index for the population aged 15 – 19 indicates equity among males and females in younger age groups (URT, 2015)<sup>8</sup>. Although, the current literacy rate is not yet supplied by the Tanzania National Bureau of Statistics.

#### Gender and age

As mentioned in Chapter 2.2 on sampling the sample size for employees was 78 which comprised of female 36% and male 64%. The sample was purposely selected to include employees from different departments and levels and to capture opinions, views, and perspectives from female employees.

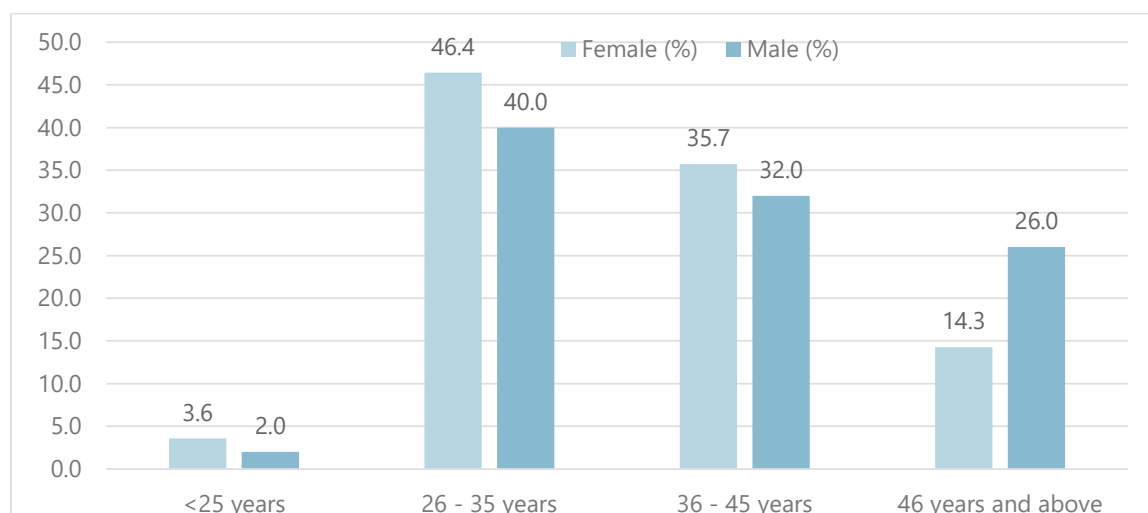
<sup>8</sup>United Republic of Tanzania (2015) Literacy and Education Monograph, 2012 Population and Housing Census Volume IV. National Bureau of statistics at <https://www.nbs.go.tz/index.php/en/census-surveys/population-and-housing-census/174-2012-phc-literacy-and-education-monograph>

Table 3.1 Sample of Employees and their role (n-78)

Employee role	Female	Male
Accountant	2	0
Clinic nurse	1	0
Enumeration	1	2
Harvesting	0	2
Human resources	0	1
Logging	3	1
Nursery	2	3
Operation person	12	23
Secretary	1	0
Silviculture	4	10
Supervisor	1	2
Technician	1	6
<b>Total sample</b>	<b>28</b>	<b>50</b>

In terms of age, 86% of female employees interviewed were aged below 46, and 74% of male employees were aged below 46 years as shown in Figure 3.2 Majority of female employees in the sample (46%) were below 35 years.

Figure 3.2 Distribution of Age and Gender



### 3.2. Household welfare analysis

To measure the well-being of the employees, the team looked into several variables ranging from income levels, living standard, household assets, access to health care services, access to the market, and clean water. These variables were assessed and compared between now and before the employee started working for KVTC.

#### Source of income

As shown in Table 3.2, the main source of income for the employees is KVTC wages and salaries. Others are farming, business, livestock, and selling livestock products. Before being employed by the KVTC, farming, casual employment, and small business were income-generating activities. However, currently, dependency on farming is reduced by about 13% and 28% by females and males respectively. This is not a surprising result because farming activities demand time and resources which might not be available after being employed.

Table 3.2 Dependable sources of income by KVTC employees (n-78)

Gender	Category	Before Employment by KVTC	Now
Female	Business	2	0
	Casual employments	9	0
	Employment at KVTC	3	24
	Farming	13	13

Gender	Category	Before Employment by KVTC	Now
	Hawking	0	0
	Livestock	0	0
	Livestock products	1	0
Male	Business	4	2
	Casual employments	14	0
	Employment at KVTC	19	44
	Farming	30	28
	Hawking	1	0
	Livestock	0	1
	Livestock products	0	1

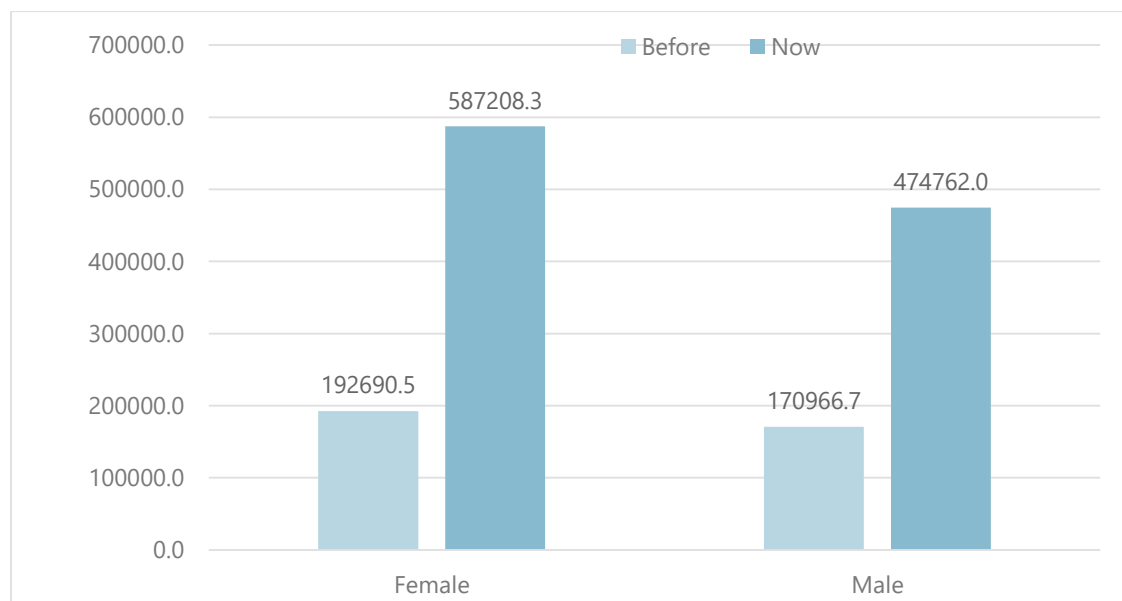
Table 3.3 Average number of livestock owned (n-78)

Gender	Livestock	Before	Now
Female	Chicken	21	2
	Cows	0	-
	Goats	0	
	Pigs	0	0
Male	Chicken	2	4
	Cows	0	0
	Goats	1	
	Pigs	1	0

The average monthly household income from all sources was found to be TZS 585,208 (Euro 230) for females and TZS 474,762 (Euro 186) for males. This is a very significant increase compared to the average income before employment with KVTC which was 192,690 TZS (Euro 76) for females and TZS 170,966 (Euro 67) for males. As shown the main earning is from the KVTC employment salaries and wages. The average monthly income in Rural Tanzania is TZS 458,092 per month (USD 179) in rural Tanzania (Smith *et al.*, 2020). This is estimated from the monthly cost of basic needs but a decent standard of living for a typical family in rural Tanzania in 2020. According to URT (2020),

the average monthly consumption per household in Tanzania's Mainland is TZS 416,927 at the national level. Implying that the income levels of the KVTC employees in the villages are more or less similar to the national level estimates.

Figure 3.3 Monthly average household income



### Employees Assets

Table 3.4 KVTC employee's assets after employment with KVTC (n=78)

Gender	Female (%)	Female (N)	Male (%)	Male (N)
Built a house	13	10	28	22
Bought a house	1	1	5	4
Television	8	6	33	26
Radio	9	7	27	21
Fridge	1	1	3	2
Furniture	12	9	23	18
Gas stove	1	1	4	3
Solar panel	1	1	4	3
Bicycle	3	2	4	3
Farm or plot	3	2	4	3
Motorcycle	-	-	1	1
Fan	-	-	4	3

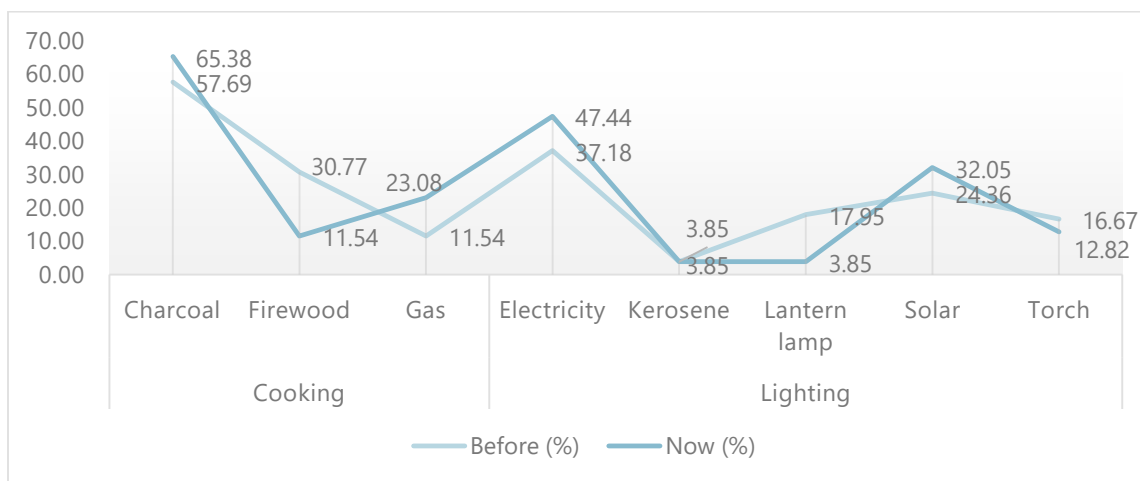


### Sources of lighting and cooking

The main source of lighting across all households is electricity 47% which is an increase of 10% compared to what was used before joining KVTC. There has been an increase in electricity connectivity through the government's rural electricity programs which have also created employment and business opportunities, and improved outcomes for students in remote areas. Other sources of lighting are lantern lamps and solar which have seen an increase also. The use of kerosene has remained the same but it is a small percentage of the household have reported using kerosene as a source of lighting (Figure 3.4). About 29% of households in Tanzania's Mainland are connected to the electricity grid (URT, 2020). Implying that the results reported about access to electricity are higher than the national-level statistics.

Charcoal is the main source of energy with 65% of respondents reporting using it. There has been a decrease in firewood, and an increase in the use of gas for cooking from 12% to 23% compared to before the employment with KVTC. The respondents mentioned that usually, they are using both gas and charcoal for cooking depending on the type of meal that needs to be prepared. Countrywide, the use of firewood for cooking decreased from 73.1% in the 2007 Household Budget Survey (HBS) to 60.9% in 2017/18 HBS (URT, 2020).

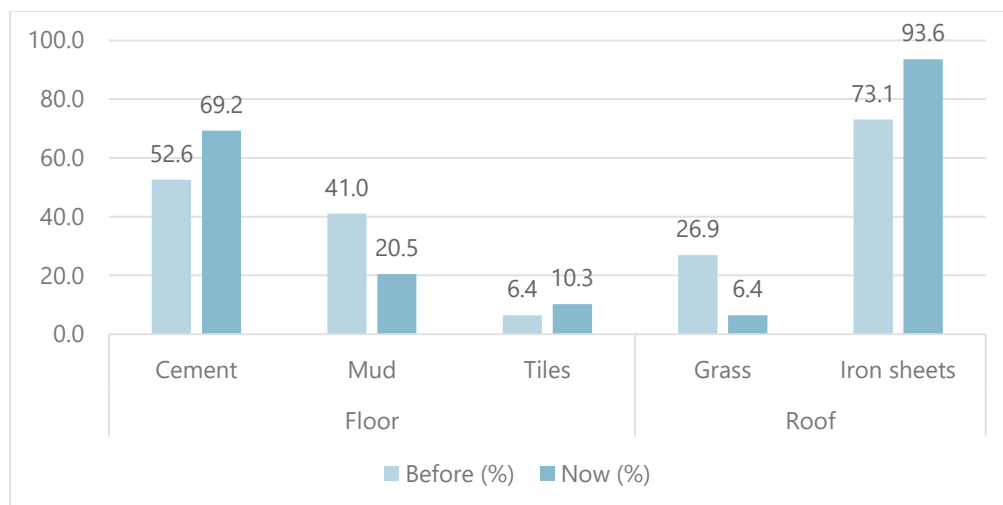
Figure 3.4 Source of Lighting and cooking energy



### Roofing and floor materials

The main (94%) roofing material across the employees is corrugated iron sheets. The results are higher than the national level. According to URT (2020), national-level statistics show that houses with roofs built with galvanized metal sheets/iron sheets in rural areas were about 76% in 2017/18. Other roofing materials are grass which has decreased significantly from 27 to 6%. The main (69%) floor materials across the employees' houses (the national level is 59% - URT (2020)) are cement and a decrease in mud floor and tiles (Figure 3.5)

Figure 3.5 Main roofing and floor material



### 3.3. Food security

To assess household security, the team looked at different indicators including the number of days in a week without food, dietary diversity, and main food items consumed every week. Generally, the employees at KVTC reported that their households are food secure. The number of people who reported going without food decreased. Very few households reported incidences of sleeping without food (Table 3.5). URT (2020) noted that about 0.8% of households in Morogoro, and about 2% of households in Tanzania Mainland usually have only one meal per day.

As stated by Tumaini and Msuya (2016)<sup>9</sup> food security is a complex phenomenon in Morogoro, and our view is, the causes for an employed household to sleep without food could be explained by multifarious reasons including lack of money to buy food, especially in the ends of months just before salaries or wages are paid. Therefore, household budget setting and management especially setting financial goals and save-up for them to ensure that basic needs are met until another wage or salary is received is important.

Table 3.5 Households that go without food (n-78)

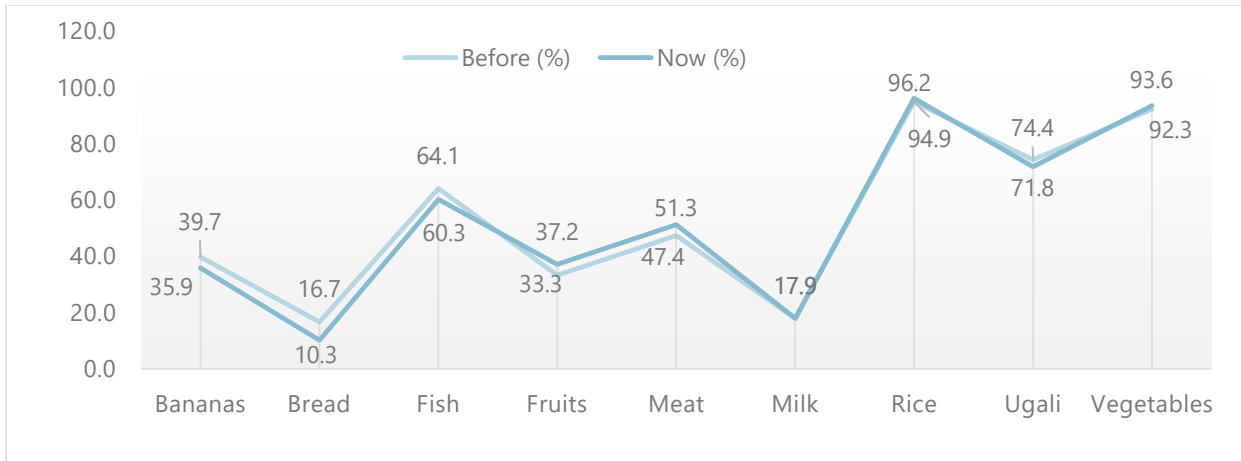
Status	Households go without food	Female (%)	Male (%)
Before	No	90	88
	Yes	10	12
Now	No	91	87
	Yes	9	13

As shown in Figure 3.6 below the main food items consumed by households are bananas, bread, fish, fruits, meat, milk, rice, *ugali*, and vegetables. 51% of all employees reported consuming meat at least once a week. This is an

<sup>9</sup> Tumaini, U. and Msuya, J. (2016). Household Food Access Insecurity along the Urban-Rural Continuum in Morogoro and Iringa, Tanzania *Developing Country Studies* 6 (8) [www.iiste.org](http://www.iiste.org), ISSN 2224-607X (Paper) ISSN 2225-0565 (Online)

increase compared to before they were employed by the KVTC. For Fish consumption, 60% reported consuming it at least once a week

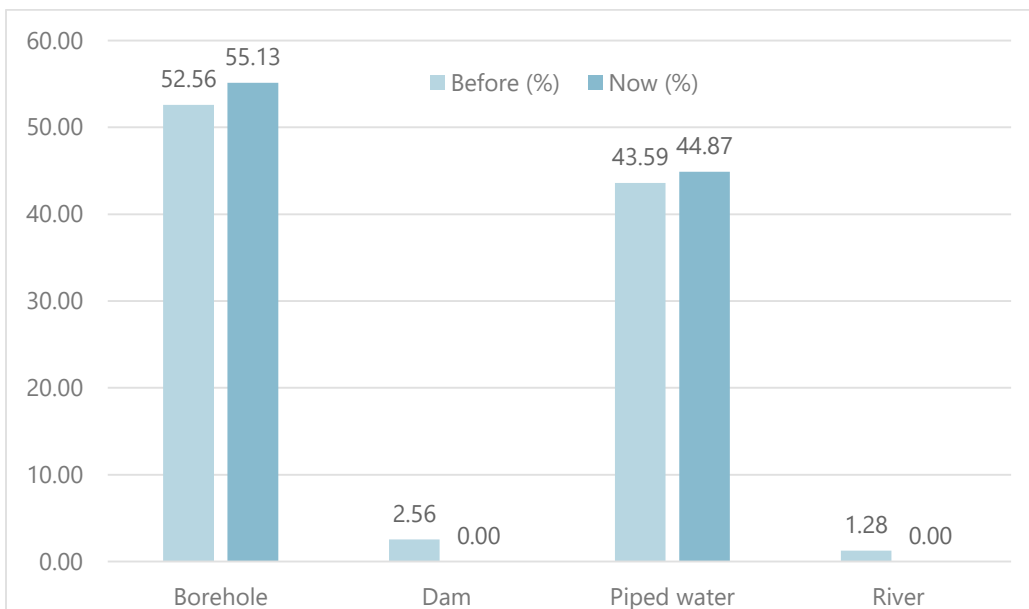
Figure 3.6 Employee household food consumption pattern



### 3.4. Access to water and healthcare

There has been an increase in piped water and borehole.

Figure 3.7 Access to water



In terms of the average distance to the water points, there has been just a slight decrease (Table 3.6). The increase (between before and after) regarding water availability is quite marginal. Although, 2017/2018 HBS shows that about 88% of Tanzania Mainland households obtained drinking water from improved sources (URT, 2020) but the point to note in Table 3.6 is that KVTC workers have access to improved sources of water (borehole and pipe water).

Table 3.6 Average distance to water points (n-78)

Status	Source	Frequency (N)	Percent (%)	Average Distance nearest water point (m)
Before	Borehole	41	53	433
	Dam	2	3	50
	Piped water	34	44	367
	River	1	1	250
Now	Borehole	43	55	245
	Piped water	35	45	378

### 3.4.1 Health care

Malaria, Typhoid, and UTI are the main health challenges that have affected respondents. There is a slight decrease in malaria cases compared to 10 years ago (Table 3.7).

Table 3.7 Respondents or households (in %) encounter incidences of diseases (n-78)

Gender	Disease	Before (%)	Now (%)
<b>Female</b>	Amoeba	4	4
	Malaria	12	11
	Typhoid	8	8
	Urine Tract Infections (UTI)	6	8
<b>Male</b>	Amoeba	10	8
	Cholera	1	1
	Malaria	23	24
	Typhoid	20	20
	Urine Tract Infections (UTI)	17	17

On this indicator, the respondents were asked if either themselves or members of the household have suffered from these diseases in recent years. However, it is important to point out that the health monitoring data from KVTC

(Table 3.8) shows a more positive trend of decreasing malaria cases among employees. The main reason behind this is the increased use of mosquito nets.

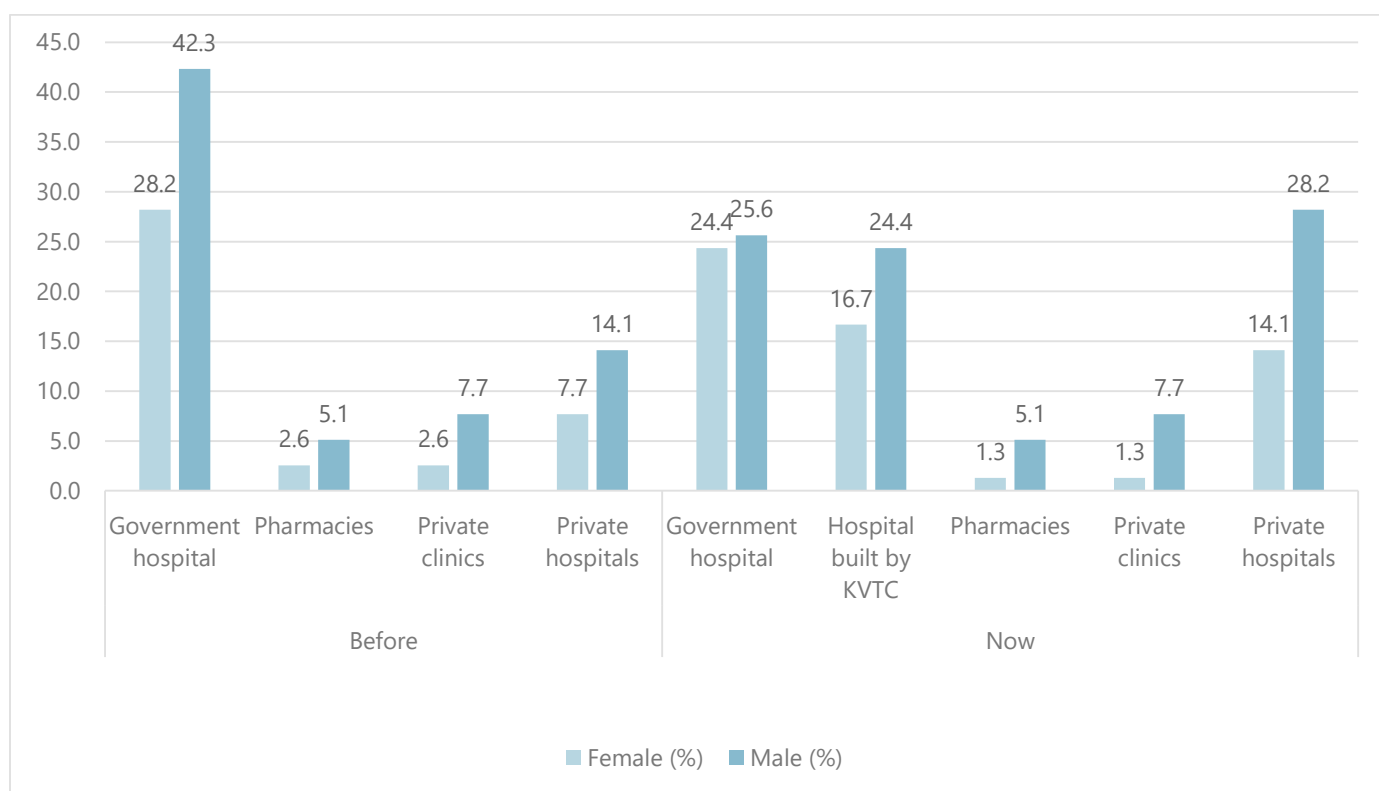
Table 3.8: KVTC health monitoring results from KVTC

2016	2017	2018	2019	2020	2021	2022
264	290	178	107	78	74	70

Source: ESG Monitoring Reports.

In terms of where are the employees getting the treatment, the majority uses government hospital but also KVTC dispensary is used by 24% of male respondents as shown in Figure 3.8.

Figure 3.8 Health facilities



### 3.5. Access to financial and telecommunication services

Our findings show that KVTC has had an impact on the increase in employee use of bank accounts as shown in Table 3.9. All KVTC employees have bank accounts either with NMB or CRDB Bank. It is a requirement at KVTC that every employee must have a bank account because salaries and wages are paid directly into each employee's bank



account. KVTC does not pay wages/salaries through cash, mobile money, or someone else's bank account. Apart from salaries and wages, all employees use their bank accounts to receive and draw salaries/wages, at the moment about 30% of female respondents are using their bank accounts for other uses such as to transfer money to their relatives and parents compared to 59% of males. National statistics show that in HBS of 2017/2018, there were about 12% of households with a member with a bank account (URT, 2020). Mobile money service is also highly used. Usage of SACCOS as one of the financial services has increased as shown in Table 3.9

Table 3.9 Financial Services Used by Gender (n=78)

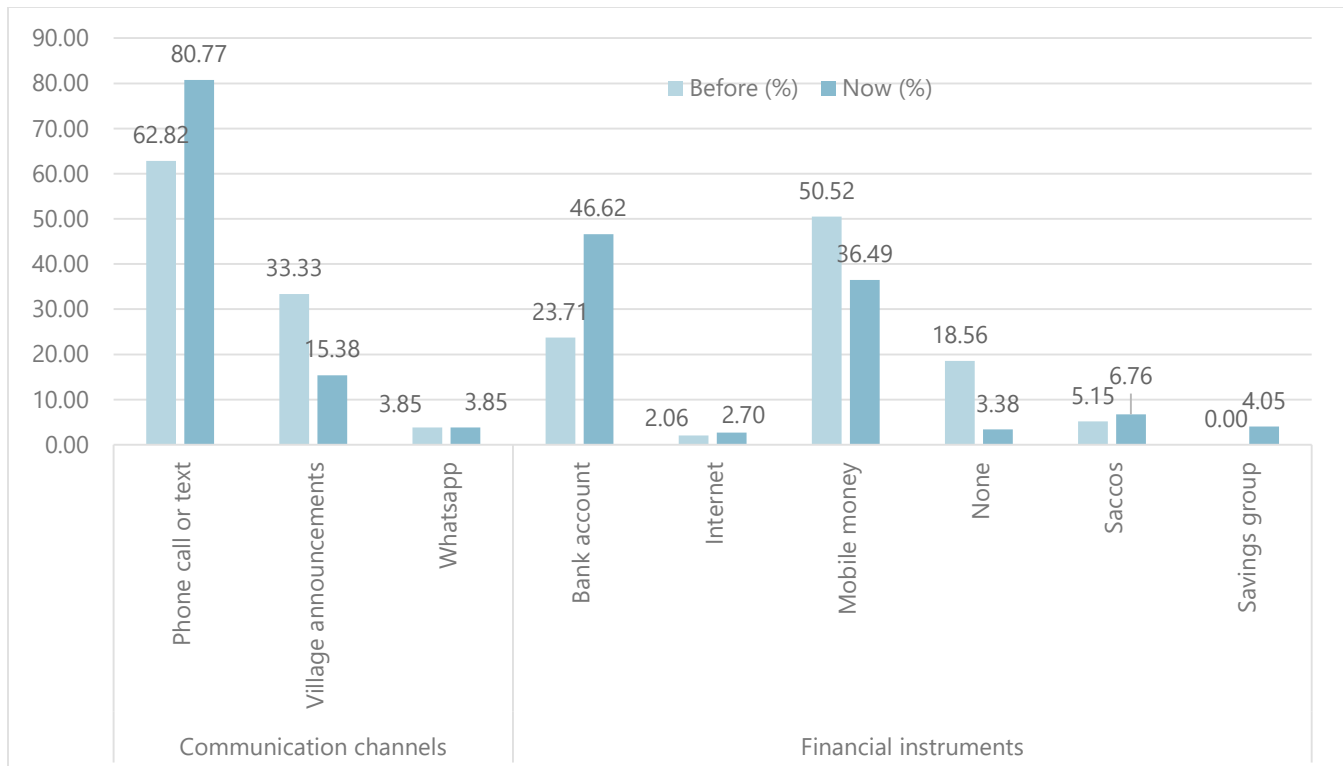
Status	Gender	Female (%)	Male (%)
<b>Now</b>	Bank Account	36	64
	Saccos	4	9
	Mobile money services	27	42
	Savings group	1	6
	Use internet	3	3
<b>Before</b>	Bank account	11	24
	Saccos	3	4
	Mobile money services	24	39
	Savings group	-	-
	Use internet	-	1

Mobile money is also one of the financial services that its use has increased. Mobile phones enable cashless transactions which reduces dependency on cash and allows money transfers to people and places where there are no banks. A very minor increase in the use of SACCOS only 6% of employees in the sample have reported using SACCOS. Also, the sample indicates a small percentage (4%) of employees have saving groups. Some respondents mentioned that they are not able to register and become a member of Mitiki SACCOS because the entrance amount is high (TZS 500,000, equivalent to Euro 196)<sup>10</sup>

There have been improvements in the telecommunication network over the years. Few respondents and also through focus group discussions mentioned improvements in telecommunications infrastructure in their areas which improved mobile phone coverage. Telecommunication in our study is restricted to mobile phone use (call or text) and less to WhatsApp and the Internet. About 81% of the employees reported using mobile phones as the main mode of communication with one another, their families, and friends as opposed to relying on village leaders as a channel to convey messages in the community in the past.

Figure 3.9 Financial and Telecommunication Services

<sup>10</sup> Bank of Tanzania (BOT) [bot.go.tz/ExchangeRate/excRates](http://bot.go.tz/ExchangeRate/excRates)

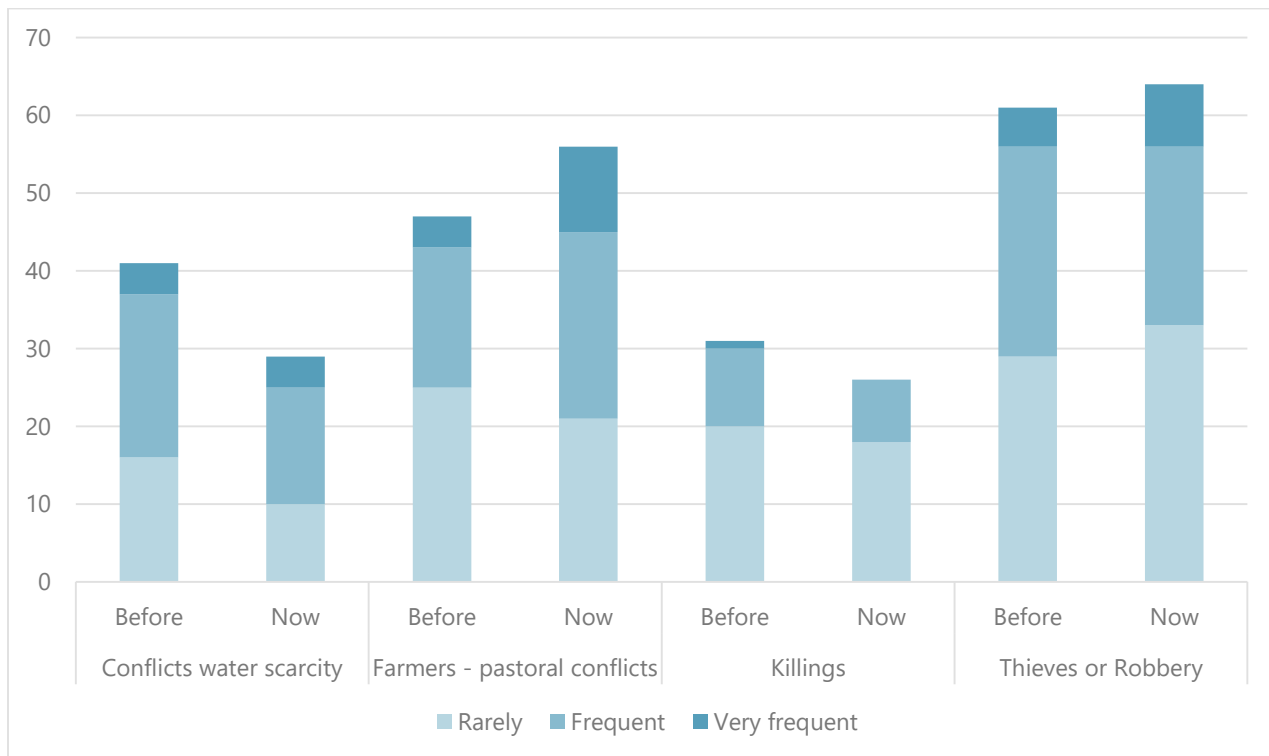


### 3.6. Security

On security, the team looked at the issue of conflicts water scarcity, farmers’ pastoral conflicts, killings, thieves or robberies by comparing the situation 10 years (2012) and how is it now. Over recent years the districts have experienced a conflict that is also attributed to resource scarcity. Farmers-pastoral conflicts are the main security issue mentioned by the majority of the employees. There has been an immigration of pastoralists from various regions to Kilombero Valley. These conflicts reduce the sense of security, but also affect food production; deaths, and injuries to people. The study sample also shows an increase in the frequency of pastoral-farmers conflicts to 11% compared to 2012.

The conflict caused by water scarcity has decreased. The majority mentioned that there is improvement in the availability of and access to water as a result of the initiatives by the Government and other stakeholders such as KVTC investing in boreholes and pipe water in the villages.

Figure 3.10 Security situation in employee areas



## 4. Impacts on Households Under Out Grower Support Programme

### 4.1. Demographic

Most of the respondents have resided in their respective villages for more than 10 years of which 46% reported living in the same area for more than 30 years. Few respondents were born in the sample villages. The majority move to the villages from various places in the country including Iringa, Njombe, Shinyanga, and Mwanza. The main reason for immigrating was to search for land for agricultural production and to find the possibility to be employed in KVTC, sugar companies, and others. This implies that the respondents had wide knowledge, experience, and interest in the areas OSP operates. Most heads of households under OSP are above 46 years (Table 4.1). The majority reported having high family responsibilities and roles.

Table 4.1: Age and gender of OSP Households (n=130)

Age group	Female (%)	Male (%)
26 - 35 years	13	8
36 - 45 years	6	12
46 years and above	81	80

The majority of OSP households have primary education.

Table 4.2 Education level of OSP households (n=130)

Education level	Female	Male	Total (n)
College	0	3	3
No formal education	2	5	7
Primary Education	28	77	105
Secondary	1	14	15
<b>Total (n)</b>	<b>31</b>	<b>99</b>	<b>130</b>

### 4.2. Household welfare analysis

#### Source of income

As shown in Table 4.3, farming is the main source of livelihood for all households regardless of gender. Other livelihoods were earned from casual labour, employment, and livestock keeping and some males were engaged in teak growing. As also reported in the previous report the main economic activities are similar across the villages. The main crops cultivated are paddy followed by maize. However, paddy was considered to be an important crop compared to others. Employment, casual labour (including those provided in KVTC), and livestock activities are emerging as new sources of livelihood as compared to 2012.

Table 4.3: OSP Households' Sources of Livelihoods (n=130)

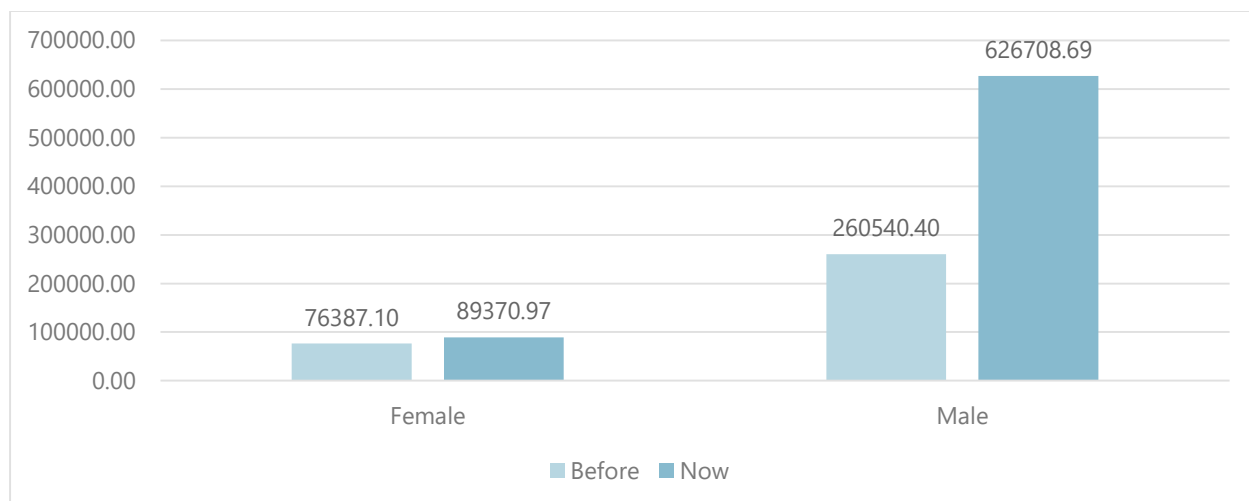
Gender	Source	Before (%)	Now (%)
<b>Female</b>	Business	4	4
	Casual employment	2	-
	Casual labor	-	1
	Farming	21	18
	Livestock	-	1
<b>Male</b>	Business	2	7
	Casual employment	4	-
	Casual labor	-	2
	Employment	-	1
	Farming	67	63
	Livestock	-	2
	Teak	1	1

KVTC's OSP households are not yet harvesting their teak plantations as the trees are not yet mature. Any significant benefits reported during this study from KVTC are related to Social Fund and Village contracts. However, all households interviewed show prospects that they will have relatively high incomes compared to those who do not grow teak when they start harvesting. Furthermore, it is important to note that, the OSP model was changed mainly due to problems highlighted during some of the interviews. Currently, KVTC provides technical support that assists households and institutions to plant teak. Households under the new model the OSP households understood that the woodlots/plantations are theirs 100% so they have no other expectations of any financial or material support from KVTC other than the provision of seedlings and technical advice. The households under the new model did not reveal wrong perceptions. In other words, there are no signs of the mistakes created by the two KVTC staff in the past in the villages where the new OSP model is operating.

Generally, the income between male and female are significantly different. The estimation of the income gender gap<sup>11</sup> was made as the ratio of median annual earnings for females per year, by male households. The analysis of the income gender gap shows that currently female-headed households under OSP earned only 29% for every TZS 1 income (Euro 0.00039) obtained by OSP households while male-headed households earned 71% (Figure 4.1).

Figure 4.1 Household income

<sup>11</sup> The income gender gap refers to the difference in earnings between female and male households



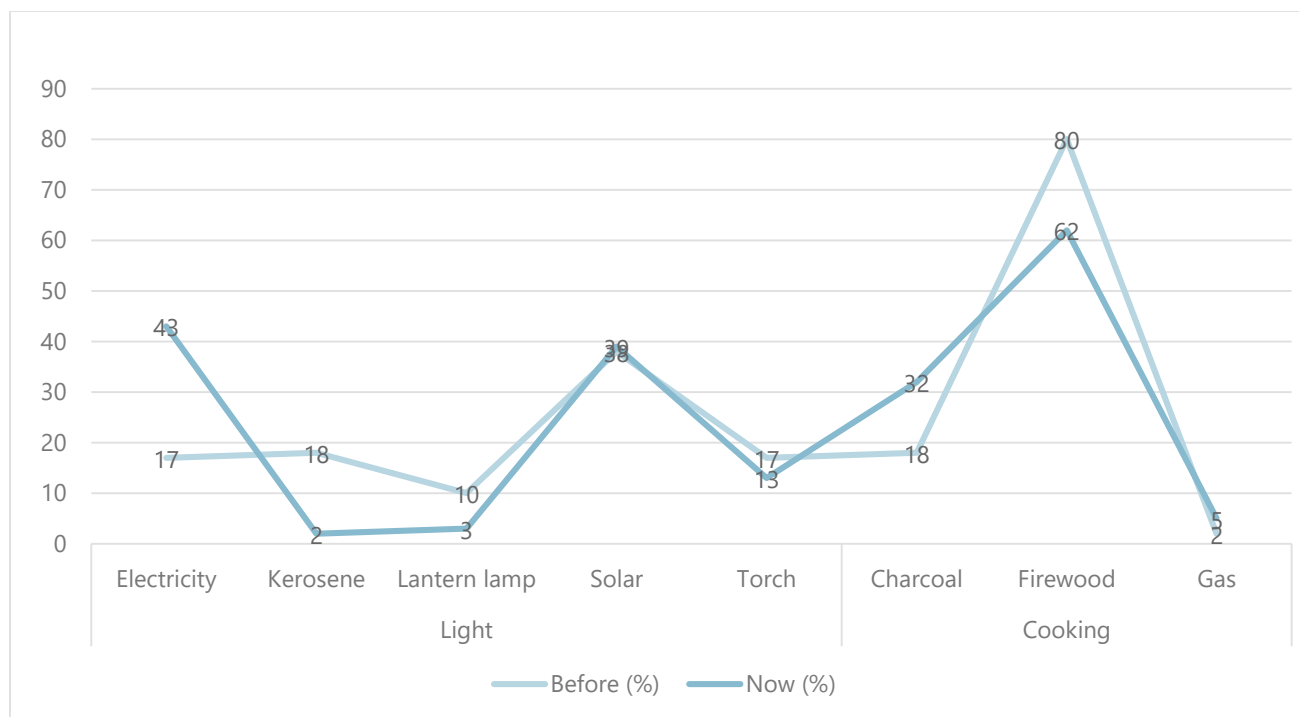
This implies that there is a gender income gap of 42%, and the gender income gap is larger now as compared to the year 2012. Although the literature shows varied methods used in the estimation of the gender gap, there is a consensus that whichever approach is used in the calculations helps to point out income-gender issues.

### Source of Energy for lighting and cooking

As shown in Table 4.4 more households are using electricity for lighting now than before 2012. The uses of kerosene and Lantern lamps for lighting in the villages have been reduced because of electricity, therefore a positive impact on the environment. Other social benefits include performance improvements in education, especially at secondary schools, and improved health delivery in dispensaries, clinics, and health centres. Regarding energy for cooking, firewood was dominant before 2012.

Currently, the number of households using charcoal and gas has slightly increased. Although households using firewood have been reduced, the majority (62%) are still using this type of energy for cooking. The OSP households that afford to use charcoal and gas (modern energy) for cooking are few. In other words, fewer households climb the 'Energy Ladder'. Energy used for cooking reflects the level of household income. Literature shows that poor households use firewood and other biomass. However, the consultants are not able to directly link this impact to KVTC activities.

Table 4.2: Energy for Household (n=130)



### 4.3. Water

Water pipe availability and access are higher now compared to the period before (2012). Pipe water use for domestic use has increased (Table 4.5). Borehole use is higher before 2012 and now. Some attributed this to KVTC. The company through Social Fund constructed boreholes in various villages.

Table 4.5 Household source of water (n=130)

Source of water	Before (%)	Now (%)
<b>Borehole</b>	32.3	35.4
<b>Piped water</b>	17.7	40.0
<b>River</b>	10.8	0.0
<b>Water well</b>	39.2	24.6

Tap water (also known as running water) is considered safe for drinking as compared to water from rivers and well. Respondents recalled the contribution of KVTC on water provision even in villages where the Social Fund projects were implemented a long time ago. The Social Fund was established to support development projects in villages in which KVTC obtained land. The majority of respondents reported that water projects supported by KVTC save recipients from walking to fetch water often several Kilometres away. The saving gives households more time to work



on other activities including resting. This is especially true for women and children, who to the traditions of the areas are tasked with the responsibilities of fetching water for household use.

#### 4.4. Food security

Most households reported that they have food, and availability is not a problem in their villages. Food production is high in most of the Morogoro region. In the OSP villages, most households can access two meals in a day. Rice and 'stiff porridge' in Swahili is called *Ugali* dominated most of the meals in the villages. These are the national main staple foods. Fish, fruits, and meat prices were reported to be a high price, therefore, were rarely consumed. There was a small difference in the consumption of meat and fish compared to 2012.

Table 4.6 Household food consumption (n=130)

Item	Before (%)	Now (%)
Bananas	58	55
Beans	87	85
Bread	11	12
Cassava	42	35
Fish	41	38
Fruits	36	32
Meat	34	26
Milk	13	14
Potatoes	27	22
Rice	89	85
Ugali	98	98
Vegetables	95	96

#### 4.5. Improvement in wellbeing

About 40% of households reported that their household-wellbeing got worsen. The main reason mentioned, especially in Sululu, Signali, and Kiberege villages, was their expectations regarding teak planting were not met (Table 4.7)

Table 4.7 Well-being status of the OSP households (n=130)

Wellbeing Status	Female (%)	Male (%)
Got worse	39	40
Improved	26	24
Remained the same	36	35

“ We teak growers were promised to get loans and some benefits by participating in teak growing but these have never been realised.

Farmer at Kiberege who has 16 ha of teak woodlot.

”

Some of the farmers complained that they were persuaded to plant teak and now their land is not enough and cannot grow other crops such as rice and maize which fetch high prices in the market. They reported that maize production has dropped because their land is now occupied by teaks. Regarding loans, most banks cannot provide loans based on biological assets only. Collateral (a house with title deed), identity (National Identity is easier to get), application letter to initiate the loan process, income verification, proof of address, credit score, the purpose of the loan, and monthly expenses are some of the requirements by the commercial banks would need to have from the teak farmers before they are considered for a loan. The requirements were barely clarified to the farmers before they plant teak on their land and this resulted in higher expectations. The farmers expected that teak operations (such as weeding, wildfire protection, pruning, and thinning) would easily be funded by cash from loans or KVTC. In addition, some of the farmers' perceptions have left a lot of questions unanswered. For example, the consultant team failed to understand why farmers said they are no longer attending their teak woodlots because they do not have the cash that was expected from loans.

This negative mind-set was deeply held in most farmers in Sululu, Siginali, and Kiberege villages where KVTC does not have teak plantations and therefore no social funds operations in these types of villages. They believe that KVTC undermines their rights. These beliefs were shaped by two earlier KVTC staff who were dismissed from employment after mismanaging OSP in these villages. This could be the cause of the OSP households' hostility towards KVTC. It is important to note that OSP households in Sululu, Siginali, and Kiberege are outside villages covered by the Social Fund and Village contracts. Therefore, the Social Fund and Village contracts' benefits do not reach these villages because KVTC has not acquired land from these villages. Although teak farmers in the mentioned villages have negative perceptions, in-depth discussions between consultants and the respondents revealed that they can improve their attitude. Therefore, KVTC, government, and other actors in the districts could cultivate a 'growth mindset' and assist teak growers to believe that they have the talents, skills, and intelligence to manage their teak without loans from banks.

#### 4.6. Livelihood assets

The extent of livelihood asset accumulation is one of the items that can be used to measure the impacts of the KVTC activities in the OSP villages. Field observations and interviews revealed that the majority of households are constructed using modern building materials. Many houses are roofed using corrugated iron sheets and the floor is made of cement. OSP households with corrugated iron sheets usually easily put a gutter, which allows them to

collect rainwater during the rainy season. About 28% of houses had houses with thatched roofs before the year 2012 but now only 8% of the households reported their houses to have thatched roofs. Thatched roofs usually leak during the rainy season and sometimes suddenly collapse. This type of roof is a dominant feature of low-earning households. However, because OSP households have not started to harvest their teak, it was not possible to attribute this development to KVTC initiatives.

Table 4.8 Construction materials by the OSP households (n=130)

Category	Item	Before (%)	Now (%)
<b>Floor</b>	Cement	44	57
	Mud	54	39
	Tiles	2	5
<b>Roof</b>	Grass	28	8
	Iron sheets	72	92

#### 4.7. Access to telecommunication and financial services

Phone calls and text messages are used by about 83% of households as means of communication (Table 4.9). In the period before 2012, only 33% of households reported using this means of communication. In that period, the announcements were made using adverts placed on village office walls or drum telegraphy to communicate with each other from far away.

Table 4.9 Communication and financial instruments (n=130)

Category	Item	Before (%)	Now (%)
<b>Communication channels</b>	Phone call or text	33	83
	Village announcements	65	15
	WhatsApp	2	2
<b>Financial instruments</b>	Bank account	18	22
	Mobile money	35	54
	None	37	15
	SACCOS	1	1
	Saving group	8	8

Mobile money and banks are the main financial services used by OSP households. Very few respondents (1%) use SACCOS.

#### 4.8. Security

Security is fundamental to people's livelihoods. This item was explored by asking pre-determined questions about whether there are water conflicts, farmers-pastoral conflicts, killings, thieves, or robberies in the villages by comparing how the situation was 10 years (2012) and how is it now. Security is not a challenge in the villages. Results in Table 4.9 shows that there is no significant difference in terms of security status between before and now.

Many respondents report an increase in the frequency of farmers-pastoral conflict in their area (34%). This was also emphasized during the Focus group discussion in several villages. The respondents mentioned that conflicts between farmers and pastoralists are most noticeable during drought seasons when pastoralists tend to move their herds in search of pasture and water and end up in the smallholder's farms.

Table 4.9 Security status in the OSP villages (n=130)

Category	Status	Frequent	Rarely
<b>Conflicts water scarcity</b>	Before	26	24
	Now	29	15
<b>Farmers-pastoral conflicts</b>	Before	20	14
	Now	34	21
<b>Killings</b>	Before	9	24
	Now	12	49
<b>Thieves or Robbery</b>	Before	46	36
	Now	29	56

## 5. Impacts on Contractor’s Employees

KVTC contractors employed between 250 and 350 people depending on the time of the year. The contractors undertake various activities including silviculture, harvesting, transportation, security services canteen service, construction, Diesel and Petrol supply, and Lumber waste and off-cut removal. The majority (52%) of the male contractors’ employees are working in silviculture, while the majority of female employees are in Canteen services.

Table 5. 1 Contractor employees (n-48)

Employee roles	Female (%)	Male (%)
Cleaning		7
Catering	50	
Fuel supply		2
Harvesting		14
Operation person	17	10
Security	17	2
Silviculture	17	52
Transport		12

### 5.1. Gender and age

A question to identify the age demographic (using age brackets) of the contractors’ workers was included in this survey, to gain valuable detail during data analysis, especially to know if there is any correlation between age and subsequent opinions and behavioural. The analysis revealed the respondents that in the age group of 36 - 45 years express more opinions on labour laws compliances than other age groups.

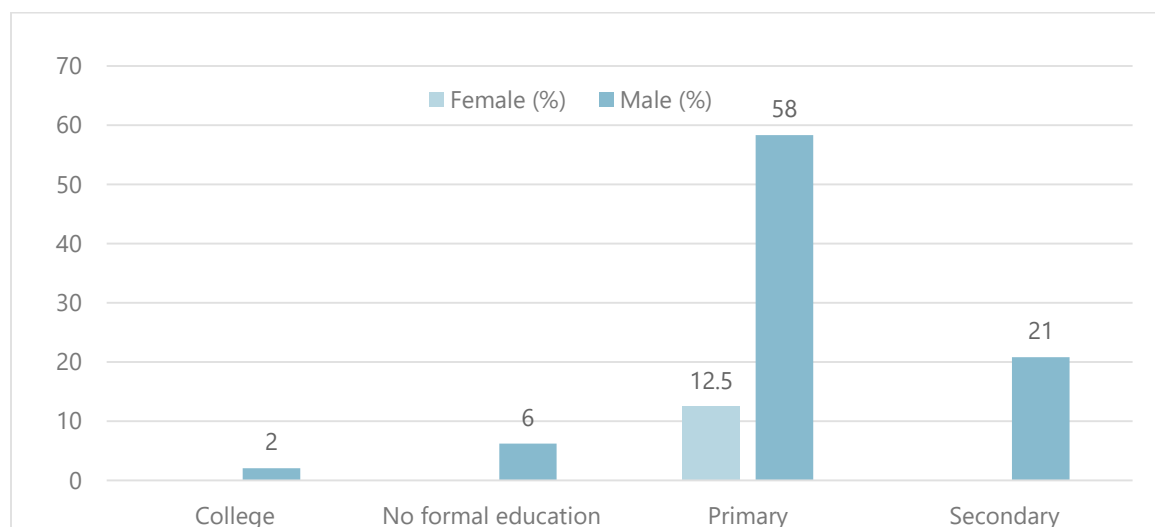
Table 5.2 Contractors’ Employees’ Age and Gender (n-48)

Age group	Female (%)	Male (%)
<25 years		13
26 - 35 years	8	23
36 - 45 years	4	33
46 years and above		19

### 5.2. Education and employment status

Contractors’ employees’ education level is mainly primary education. Few have attained college or secondary school level of education, and in this sense semi-skilled. The implication for low levels of education is many are employed as casual labourers.

Figure 5.1 Education level of the contractors' employees



There is a high level of casualization of the workforce in most of the contractual work. At least 29 and 80% of female and male workers respectively of our sample were found to be employed on a temporary or casual basis. Some of them reported working as casual workers with the same contractor for many years. All casual employees are Tanzanians. The majority of owners of the sawmills (that buy logs from KVTC) the temporary workforce is also engaging in other activities including farming and business (Table 5.3).

Table 5.3 Source of Income by the Contractors' Workers (n-48)

Gender	Source of income	Before (%)	Now (%)
<b>Female</b>	Casual employment at KVTC		29
	Farming	100	71
<b>Male</b>	Business	4	3
	Casual employment at KVTC		80
	Farming	63	50
	Hawking	2	
	Livestock products	2	

Some respondents mentioned that they wish to have proper contractual agreements between contractors and their workers so that they are more aware of their rights and obligations according to Labour laws and regulations.

Casual employment status is not recognised by the Employment and Labour Relations Act, of 2004, it does, however, recognize fixed-term contracts for employees (limited by a specific task or time). Although this is not a direct issue of KVTC but can cause a bad reputation to the already good image of the company.

### 5.3. Contractors' Workers' Incomes and Welfare Analysis

Below is the contractor worker's income by gender and in comparison, with their income before they started to work for the contractor's company.

Table 5.4 Contractors' Workers Income (n-48)

Status	Female	Male
<b>Before</b>	180000	160970
<b>Now</b>	206333	307216

There is an increase in income compared to before they started working with KVTC contractors as shown in Table 5.4

The contractors' workers expressed a decrease in the possession of livestock (Table 5.5). However, pork keeping has increased and possession of cattle has reduced. Pigs are reported to require a small place for rearing and provide high income compared to cattle. The majority attributed this achievement to KVTC initiatives. It is important to report that there is one contractor (who was in silviculture - nursery) who possessed 2000 chickens and 58 pigs. However, the activity was not performed in the KVTC area. The number of pigs possessed by this contractor inflated the figures for chickens and pigs when included in the analysis. Therefore, it was decided to exclude this contractor from the analysis of livestock variables and results.

Table 5.5 Contractors' workers' possession of livestock (n-48)

Gender	Livestock	Before	Now
<b>Female</b>	Chicken		6
<b>Male</b>	Chicken	258	262
	Cows	13	5
	Pigs	4	22

On the welfare of the workers, the consultant team observed that there are various welfare facilities provided by the contractor and KVTC to all workers (including contractors' workers). The facilities include water, and fully equipped dispensary, and sanitary facilities (toilets, showers, changing rooms). The facilities are available and accessible to casual and permanent employees. This complies with the law in the United Republic of Tanzania which among other things requires contractors to provide important welfare facilities to workers.

The majority of the contractor’s employees (66% for Females and 50% for males) have reported that the overall well-being of their household has improved (Table 5.6). Some respondents reported that reduced staff turnover makes them happy because they are assured of their job and increased stability within the company.

Table 5.6 Contractors’ Employees’ Well-being (n=48)

Wellbeing status	Female (%)	Male (%)
Got worse	16.7	14.3
Improved	66.7	50.0
Remained the same	16.7	35.7

### Monitoring and enforcement labour laws

Tanzanian laws require monitoring and enforcement of labour laws to ensure that contractors’ workplaces are safe and employees’ welfare is complied with. KVTC has very good and standard monitoring processes which are normally included in the contract signed with contractors. However, to what extent the monitoring is implemented for instance through visiting the contractors working places to monitor enforcement of the law was not clear to the consultants.

Some of the contractors' workers indicated that they are not aware of labour law and rights. KVTC could conduct monitoring to ensure that the obligations of the contractors are fulfilled. However, the KVTC argued that there is a need to have a balance because contractors are independent.

*... regular monitoring is important but how that should be done without interfering with the work of the contractors who are supposed to work independently per the contract, said the KVTC CEO.*

However, the contract with contractors can mandate KVTC to access Occupational Safety and Health Authority (OSHA) reports and use them to monitor the compliance of the contractors. OSHA activities in workplaces aim to oversee safety and health in Tanzania Mainland to improve the safety of the workplaces and the health of employees while at work.

### Energy for lighting and cooking

In terms of energy sources, most contractors’ workers reported that now they are using charcoal (60%) and some use gas (13%) as a source of energy for cooking and electricity for lighting as compared to the situation in the past 10 years (Table 5.7). The use of firewood has decreased from 46% in 2012 to about 27% now. Firewood as an energy source for cooking is in the category of inferior goods. Meaning that an increase in income (see Table 5.4 above) would cause a fall in demand. This decrease in firewood demand can directly be associated with an improvement in income earned by working with KVTC as a service provider.

For lighting, there has been an increase in clean energy i.e. electricity and solar, and no one reported to be using kerosine anymore. This corresponds with the increased income mentioned above.



Table 5.7 Contractors worker's source of energy (n-48)

Category	Source	Before (%)	Now (%)
<b>Cooking</b>	Charcoal	48	60
	Firewood	46	27
	Gas	6	13
<b>Lighting</b>	Electricity	27	40
	Kerosene	10	0
	Lantern lamp	8	0
	Solar	19	35
	Torch	35	25

### Main roofing and floor

The findings show that most of the houses in which the contractors' workers reside have floors made of cement and roof constructed with a corrugated iron sheet. The houses are standard and provide decent homes for the workers. However, as noted in Table 5.8 there are still workers who live on mud floors and grass roofing 19%.

Table 5.8 Floor and roofing material (n-48)

Category	Material	Before (%)	Now (%)
<b>Floor</b>	Cement	42	50
	Mud	56	46
	Tiles	2	4
<b>Roof</b>	Grass	35	19
	Iron sheets	65	81

### 5.4. Food security

Rice and stiff porridge (*Ugali*) dominate most of the meals. Fish, fruits, meat, and milk were the main side dishes reported to be used by the contractors' workers. This implies food security for the majority of the workers.

Table 5.9 Food consumption (n-48)

Food item	Before	Now
<b>Bananas</b>	36	30
<b>Bread</b>	5	6
<b>Fish</b>	29	31
<b>Fruits</b>	23	29

<b>Meat</b>	24	24
<b>Milk</b>	12	16
<b>Rice</b>	46	46
<b>Ugali</b>	46	46
<b>Vegetables</b>	48	47

## 5.5. Health

In terms of diseases, Amoeba, Malaria, Typhoid and Urine Tract Infections (UTI) were the main health challenges reported by the workers. Similar to the results in Table 4.2.1 in the URT (2020), our results in Table 5.10 do not show any trend (increase or decrease in diseases). URT (2020) reported incidence of illness or injury was lower in the HBS 2017/18 compared to HBS 2011/12 for some ages in all areas in Tanzania, except in Dar es Salaam where there was an increase. This was also reported by OSP households and KVTC employees. Unlike KVTC employees, there was no evidence that the contractors' workers have health insurance that would cover them against unexpected, high medical costs. Health insurance for these workers is important because the Morogoro region has a high prevalence of UTI, typhoid, and malaria fevers (Table 5.10)

Table 5.10 Main diseases reported by Contractors' Workers (n-48)

<b>Gender</b>	<b>Disease</b>	<b>Before (%)</b>	<b>Now (%)</b>
<b>Female</b>	Amoeba	21.1	23.8
	Malaria	26.3	19.0
	Typhoid	26.3	28.6
	Urine Tract Infections (UTI)	26.3	28.6
<b>Male</b>	Amoeba	13.3	13.2
	Malaria	31.7	31.4
	Typhoid	27.5	27.3
	Urine Tract Infections (UTI)	27.5	28.1

## 5.6. Access to Water

Boreholes and pipe water were the main water sources pointed out by the respondents. These are part of welfare facilities including accommodations that are important to the workers.

Table 5.11 Source of water (n-48)

<b>Source of water</b>	<b>Before (%)</b>	<b>Now (%)</b>
------------------------	-------------------	----------------

<b>Borehole</b>	50	68.75
<b>Piped water</b>	21	27.08
<b>River</b>	8	2.08
<b>Water well</b>	21	2.08

## 5.7. Security issues

Results in Table 5.12 show that there are no serious security issues in the communities where they work and live. However, there has been an increase in the frequency of the conflict between pastoral and farmers compared to 2012.

Table 5.12 Security issues pointed out by Contractors' Workers (n=48)

Category	Status	Frequent	Rarely	Very frequent
<b>Conflicts water scarcity</b>	Before	1	12	3
	Now	3	8	2
<b>Farmers-pastoral conflicts</b>	Before	12	9	3
	Now	11	10	10
<b>Killings</b>	Before	4	8	
	Now	3	7	
<b>Thieves or robbery</b>	Before	18	12	3
	Now	9	22	4

## 6. Poverty analysis

On average, poverty indices of the KVTC employees, contractors' workers, and OSP households indicate that about 14%, 37%, and 37% fall below the poverty line (Table 6.1). Analysis of the poverty index by gender (Figure 6.1) revealed that there are higher percentages of females in all stakeholders (KVTC employees, OSP households, and contractors) that fall below the poverty line compared to males. As reported by Idris (2018)<sup>12</sup>, some of the main barriers to women's progress out of poverty in Tanzania are low education; low asset accumulation, and low access to financial services. For those engaging in business, difficult legal and regulatory frameworks and lack of access to business development services limit them to generate enough profit margins.

Therefore, this poverty profile results suggest that, while KVTC is providing important interventions to improve the livelihood of its employees and the community, more focus on female key stakeholders would create more impacts on poverty reduction.

Table 6.1 Average Poverty Indices by KVTC Stakeholders

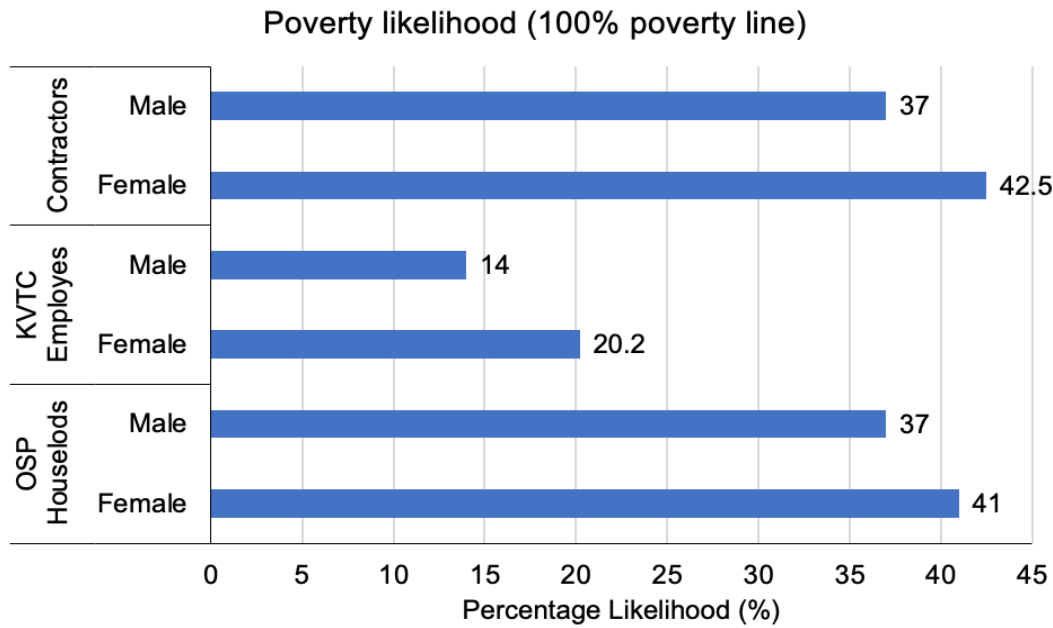
Category	Final Score	Poverty likelihood (100% poverty line)
OSP Households	56	37
KVTC Employees	41	14
Contractors' workers	58	37

The households under OSP have a high number of households below the poverty line because they have not started to realise incomes from Teak. Like many other forestry enterprises, they have long-term investments. In other words, incomes are realised after many years of investment and waiting. Therefore, investing in alternative income-generating activities that would enable realization of intermediate incomes is paramount.

The results of the poverty indices of the KVTC employees are well above the average Tanzania poverty level as presented by the Household Budget Survey (28.2% in 2011/12 to 26.4% in 2017/18). This indicates that the incidences of basic needs poverty have declined. This is a result of continued efforts by the Government and development partners such as KVTC in improving living conditions social welfare access to basic services and productive assets such as improved lighting sources increased access to roads markets and water health and education. These are factors behind such lower poverty indices in the KVTC areas.

<sup>12</sup> Idris, I. (2018). Barriers to women's economic inclusion in Tanzania, [https://assets.publishing.service.gov.uk/media/5b432d9e40f0b678bc5d01c1/Barriers\\_to\\_womens\\_economic\\_inclusion\\_in\\_Tanzania.pdf](https://assets.publishing.service.gov.uk/media/5b432d9e40f0b678bc5d01c1/Barriers_to_womens_economic_inclusion_in_Tanzania.pdf)

Figure 6.1 Poverty likelihood



## 7. Discussion

As shown in the findings chapters, there is an improvement in the livelihoods and wellbeing of KVTC's direct stakeholders: employees and out-growers, contractors and their employees, villages, and local government. The following sub-section provides a summary of how various stakeholders are impacted (positively/negatively) with KVTC initiatives.

### 7.1. What are the impacts of the KVTC on the well-being of the employees?

KVTC is providing several benefits to the employees which have positive impacts on the employees: These include:

- The canteen is accessible to all workers for breakfast and lunch,
- KVTC reviewed the meal allowances of workers in the field,
- There is an increase in percentages of seasonal workers permanently employed,
- The salaries are benchmarked to local and international companies,
- KVTC provides medical cover to senior staff
- Sundry sales from offcuts are used to solve workers' problems
- Mitiki Saccos: Some workers benefit from this financial facility. For some small reasons, some reported that they are not able to register themselves with Mitiki Saccos

Various trainings were either facilitated or organised and implemented by KVTC. Data from the company for the past 10 years shows training investment done to all employees of different levels.

KVTC has had an impact on the increase in employee use of bank accounts. All KVTC employees have bank accounts either with NMB or CRDB Bank. The salaries and wages are paid directly into each employee's bank account. Mitiki SACCOS provides loans to members ranging from small loans for school fees and agricultural inputs to larger loans for house construction as well as the purchase of farming tools and equipment. Although it is only a small percentage (4%) of employees in the sample indicated to be members of SACCOS.

Nevertheless, the majority of KVTC workers depend only on their salaries and wages. The income diversification of the employees is low causing most of them to depend on monthly salaries and wages from KVTC. Without any other source of income or business, they might not have the resilience/resources to cope with a negative change such as if they lose employment.

## 7.2. What is the impact of KVTC on Out grower's

The livelihood and wellbeing of out growers' households have improved. The household average income has increased, although the gender income gap is larger now compared to the year 2012. Female-headed households did not have access to diverse sources of livelihood compared to male respondents who reported diversity in sources of livelihood in addition to agriculture. Casual labour, small business, and livestock activities were mentioned as additional sources of income. However, the team concluded that the increase of income is not yet attributed to KVTC. Though the study included the out growers from the old model and new model their teak trees are not yet mature. The teak takes a minimum of 15 years to mature. Once they will start to harvest the trees the out growers are guaranteed a market for the logs OSP by KVTC, and according to the new OSP model, the growers are free to sell all their logs to the highest bidder.

Through the Social Fund, schools' classrooms, dispensaries, and health centres were built and boreholes and water pipes were established. This to some extent has increased pupil enrolments and improved the quality of health provision. These are the main factors that have contributed to the development of education and health facilities in the villages where KVTC obtained lands. Also, parents are aware of the importance of education.

There is a difference in perception between the growers in the villages where KVTC owns the land and those where KVTC does not. About 40% of households reported that their household-wellbeing got worse. The main reason mentioned, especially in Sululu, Signali, and Kiberege villages, was their expectations regarding teak planting were not met. It is important to note that OSP households in Susulu, Signali, and Kiberege are outside villages covered by the Social Fund and Village contract. Hence the OSP households in these villages do not have access to support and investments for instance building the classroom, boreholes, roads, or health clinics. On the opposite, the growers from the villages that were covered by KVTC have reported satisfaction on their collaboration with KVTC.

On the other hand, population increase due to the KVTC industry and business was reported. To some extent has caused a multipliers effect, especially on business in Mavimba.

## 7.3. On Contractors' workers

There is an increase in income compared to before they started working with KVTC contractors as shown in Table 5.4 This is attributed to employment at KVTC but also other income-generating activities such as farming which the majority (more than 50 percent) have continued doing alongside their employment at KVTC

Casual employment from KVTC contractors is mentioned as one important source of income alongside farming, and the business of agricultural products. The majority of the contractor's employees (66% for Females and 50% for males) have reported that the overall well-being of their household has improved in terms of the ability to meet family needs such as afford meals and pay for the education of their children.

On the welfare of the workers, the consultant team observed that there are various welfare facilities provided by the contractor and KVTC to all workers (including contractors' workers). The facilities include water, and fully equipped dispensary, and sanitary facilities (toilets, showers, changing rooms). The facilities are available and accessible to casual and permanent employees.

There is increased access to improved sources of energy for cooking and electricity for lighting as compared to the situation in the past 10 years. The use of firewood for cooking has decreased from 46% in 2012 to about 27% now. Firewood as an energy source for cooking is in the category of inferior goods.

#### 7.4. What are the benefits of the KVTC to the wider community?

The study findings show that there is a vertical and horizontal adaptation of the technologies for teak planting and tending. There are many households that are neither in the old nor new OSP but have planted teaks. Some individuals make an income by selling seedlings to other people. This provides indications that KVTC is enabling the accumulation of livelihoods. Generally, there is an increase in natural capital in villages as a result of increasing Teak woodlots.

Generally, there is an indication of accumulation of human capital as a result of KVTC. The company enables the acquisition of new skills and knowledge relating to different livelihood activities example teak production, health, and education. Also, physical capital is increasing as in some places KVTC facilitated maintenance or minor construction of street roads, water, and buildings. The district officials at Malinyi and Ulanga acknowledge that KVTC is one of the main investors in the district. They contribute to the revenue of the district through service levies.

KVTC's role in enhancing the health sector was observed and acknowledged during the discussions with officials and the community. Building the health centre improved the environment at the hospital and the health of women.

*"... Before this building was built with the support of KVTC, women in labour were using the same building with other patients. But now this building is dedicated to reproductive and child health. It has provided women with space where they can receive maternity service in privacy and dignity and many women appreciate it"*

*Clinical Officer In charge  
Kichangani Health Centre*

On social capital, KVTC has enabled the development of formal and informal social capacities or social relationships of the employee. This includes family networks, members' trust, and access to wider insti-



tutions of benefit to communities. This trust and network can improve social capital and hence communities' incomes and savings. The capital and assets of SACCOS have increased however, some KVTC employees reported that the entrance/registration fee is high and therefore are not able to join and benefit from the opportunities provided by SACCOS.

KVTC investments through the Social Funds, Village Contract, and OSP show that the company is conscious that it is working with communities that are poor and want to contribute to community development. Despite the investments in the KVTC-impacted areas, there is a very high perception that KVTC should solve 'all' communities' problems. Many do not appreciate that KVTC is doing business.



Figure 7.1 Health centre construction at Alabama village in Malinyi district with a contribution from the government and payment from the social contract

## 7.5. What is the KVTC impact on women's livelihoods

Interviews with the KVTC management and female respondents demonstrate the company's commitment to Gender diversity. Over the past 10 years, the company has increased the number of female employees. In 2012 it had a total of 16 employees and by 2022 it had 63 female employees working across different departments.

*" Looking back from 2014 when I first came to the KVTC I see a lot of positive changes. Biggest is the increase of female operators and fewer cases of sexual harassment because the right policies and measures have been put in place"*

*Female respondent KVTC*

Several studies have shown that Gender diversity can improve a company's financial performance. Apart from that it has been proven that when women are economically empowered, they are catalysts for broader societal progress. Women who earn income generally see improvements in their status and decision-making power in their homes and communities. However, simply hiring women isn't enough. To reap the many benefits of gender diversity, organisations need to empower those workers to full potential to attain growth and success.

Often women are limited by discriminatory gender norms that deem specific professions as inappropriate for women, which end up limiting women's opportunities. The interview with management mentioned a female employee that was not deemed suitable for the position because women don't drive a motorcycle. KVTC trained her now she is driving the motorcycle. With this case, it shows that the company is going beyond recruiting by also providing opportunities and additional skills for women to take on positions that are assumed that can only be done by men.

*"I started working for KVTC as a seasonal worker in 2014 and got permanently employed in 2019...one issue that was affecting female seasonal workers was, if you go on the maternity leave you lose your job. When you come back your position is no longer there. As women we were afraid to go and give birth or even getting pregnant. Through our trade union and discussion with KVTC management this has been addressed. Now all employees including seasonal workers can keep their job after coming back from maternity leave"*

*Female respondent KVTC*



Figure 7.2 KVTC female employees, CEO, and the study team during the celebration of International Women's Day at KVTC Mavimba premises

Overall, the female respondent expressed their job satisfaction due to the inclusive workplace and good support from KVTC management. As mentioned in Chapter 3 above 39 % of female respondents mentioned that their lives have been improved. This includes improvement in living standards, household assets, access to health care services, access to the market, and access to clean water and energy.

On average, household income female employees have increased their income from TZS 192,960 (about Euro 76) before employment with KVTC to TZS 587,208 (Euro 230) and the main source of income is employment with KVTC (see Figure 3.3 monthly average household income). However, their participation in financial instruments such as Mitiki Saccos is much lower. Out of 63 female employees, only 14 are members of the Saccos.

## 8. Conclusion and Recommendations

This study was set to answer to what extent livelihoods and well-being have improved in KVTC-affected areas and especially among KVTC's direct stakeholders, and if the improvement (or lack of it) can be attributed to KVTC. As shown through the findings the livelihood of KVTC employees, OSP households, KVTC contractor employees, and the wider community have been impacted positively by KVTC. It has contributed to the increase of livelihood assets and overall well-being in several aspects. There is a wealth of evidence that KVTC is influencing some cultural practices in communities where they work with positive results such as providing employment to the positions that were initially assumed that only men can do, increase in school enrolment and improvement of learning outcomes.

The team identified key recommendations that are presented below:

- This poverty profile result suggests that activities that more focus on female key stakeholders would create more impacts on poverty reduction;
- Most of the KVTC workforce is young (below 45) and their needs and demand are increasing as they age. KVTC could support employees to access other financial facilities apart from the monthly salary;
- Mitiki SACCOS is increasing in assets and capital, some employees are not able to register and benefit. More training on how the SACCOS is operating and encouraging employees of all levels to join;
- Invest in Income Generating Activities (IGAs) in the old and new models of OSP. This will guarantee the availability of the intermediate incomes as they are waiting for the teak to mature. The IGAs in bee-keeping and mushroom projects which KVTC is already preparing for will be very important;
- Continue to increase awareness using various channels of communications on how the KVTC is working to ensure that it wants to be part of local community DNA. Communication messages on the science part of teak may not reduce the hostility of the OSP households in villages where KVTC does not have social fund projects such as Sululu, Signalali, and Kiberege. The messages should focus on mitigation of over expectations raised in the past and growth mindset changes towards teaks;
- Support contractor compliance with labour laws and staff benefits. KVTC should consider additional monitoring to enhance compliance. This will minimise future reputation risks.

---

## 9. Annex



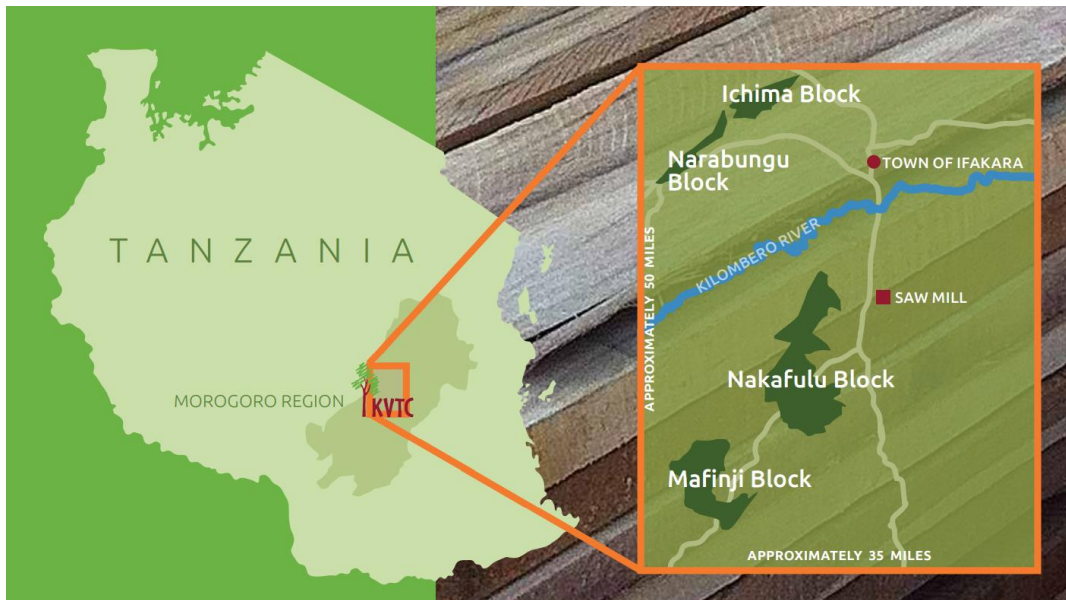
## Annex 1: Terms of Reference

rev 22.11.2022

### TERMS OF REFERENCE FOR A STUDY ON THE SOCIO-ECONOMIC IMPACT OF KILOMBERO VALLEY TEAK COMPANY

#### 1. Background

Established in 2012, Kilombero Valley Teak Company (KVTC) is a teak plantation set on four distinct parcels of woodland between the Udzungwa National Park and Selous Game Reserve. The total concession area is 28,000 hectares of which 8,000 hectares are planted teak and 20,000 hectares are protected natural forest, grasslands, and wetlands area. KVTC's concessions are located in 17 villages of three districts with a population estimate of 60,000+ inhabitants.



KVTC started planting operations in 2012 and final teak plots were established in 2010. Today, KVTC is Africa's largest private teak company and the largest exporter of wood products in Tanzania. In addition to exports of teak lumber, and value-added wood products as well as local sales of round logs, it is believed that KVTC has played an important role in supporting socio-economic development in its area of operation. In the first 25 year of operations, KVTC's stakeholders spent over USD 60 million to establish 8,000 hectares of teak plantations and a modern sawmill. Over two-thirds of these funds have flowed directly into the Tanzanian economy in the form of wages, procurements from Tanzanian businesses and contractors, investments in local communicates, and local and national taxes.

More specifically, KVTC is deemed to have supported the livelihoods of key stakeholders through the following channels:

- 1) Employment and salaries: for decades KVTC has offered direct employment to over 315 people, many of whom are from nearby villages. The annual wage bill is around USD 875,000 (in 2021) and the average monthly salary is USD 232.
- 2) Local purchases of goods and services: KVTC has purchased goods and services locally with a value of over USD 3 million every year. These services have supported local companies and created and sustained e.g. approximately 480 jobs in the region.
- 3) National and local taxes and levies: KVTC pays an average of USD 650,000 per year in taxes and levies.

4) Out-grower support program: KVTC has helped more than 600 local farmers plant teak on their farmland. To date, out-growers have planted a total of 1,100 hectares of teak. By the time of harvest, money from these trees can be substantial for the households.

5) Social Fund to support the communities that have granted land to KVTC: Each year KVTC contributes about USD 40,000 to community projects in each of the 18 villages associated with KVTC. These funds have helped build schools and roads, improve medical care and serve other needs of the communities.

6) Providing local communities with timber for free to use as firewood, and in construction and furniture production, among other uses.

In 2011 and 2012, three surveys were conducted in KVTC Community Voices Project to provide insights on how KVTC was viewed by its stakeholders – villagers, contractors and contractors' employees. The key findings and insights included:

- the level of understanding in the villages of KVTC and of teak is low and often incorrect;
- only one-third of community survey respondents had any experience of wage income in the past year, and KVTC was directly or indirectly the source of two-thirds of that employment, yet scores for fairness and satisfaction with KVTC as an employer were low, especially among the contractors' workers;
- new arrivals tend to have more negative opinions of KVTC than established residents.

The survey was repeated in 2016 by KVTC's own resources with broadly similar findings. Overall, however, the NPS scores had deteriorated and KVTC was not deemed to have e.g. contributed to improved purchase power or having made a significant impact on people's lives. KVTC is jointly owned by the Africa Sustainable Forestry Fund (ASFF), managed by Criterion Africa Partners, and Finnish Fund for Industrial Cooperation (Finnfund).

[Criterion Africa Partners](#) is a private equity firm that invests in opportunities across the forestry value chain and seeks to enhance productivity and create value for the benefit of all stakeholders in its key focus areas: Rehabilitation of existing plantations, downstream manufacturing and wood-based energy generation. Africa Sustainable Forestry Fund raised \$160 million in 2010 and had eight portfolio companies. At the moment two companies remain in the portfolio, including KVTC.

[Finnfund](#) is Finnish development finance institution (DFI) with a mission to build a sustainable world by investing in responsible and profitable businesses that generate measurable development impacts in developing countries. Finnfund's priority sectors include energy, forestry, agriculture, financial services, and digital solutions and infrastructure.

Finnfund makes 20-30 new investments annually with a total worth of about 200 - 250 million euros. In June 2022, Finnfund had made € 1,23 billion worth of investments and commitments in nearly 200 projects across 45 countries. Finnfund's forestry investments and commitments amount to € 225 million.

Finnfund is signatory to [Operating Principles for Impact Management](#) and [2X Gender Finance Challenge](#).

## 2. Objective and scope of the study

Given the duration and scale of KVTC's operations in the area, and especially with the 17 villages, it is possible that KVTC has contributed to improved livelihoods in the area. The main objective of this study is to find out 1) if livelihoods and wellbeing have improved in KVTC affected areas and especially among KVTC's direct stakeholders especially employees and out-growers, but also contractors and their employees, villages and local government; 2) what are the main contributing factors to the improvement (or lack of improvement); and 3) can some of the improvement (or lack of it) be attributed to KVTC; 4) and provide recommendations on any changes that KVTC needs to adopt to improve its impact on livelihoods. A specific emphasis should be put on assessing KVTC's possible impact on women's livelihoods.

It is suggested that the study will be conducted by administering a sufficient number of face-to-face interviews with representatives of each above-mentioned stakeholder groups. The consultant is requested to outline the proposed

methodology for conducting the interviews, including number of people to be interviewed, tentative questions and timetable in its proposal. In the absence of comparable data and statistics, it is proposed that the researchers would use outcome harvesting methodology with before-now -questions and Poverty Probability Index or [Tanzania Poverty Scorecard](#). If deemed feasible, interviews with control groups could be considered.

### **3. Deliverables and Timeline**

The work should commence in December 2022 – January 2023 and the final report should be ready in April - May 2023. Before conducting the actual interviews, the Consultant will submit a methodology paper with detailed questions, sampling methodology and description of data analysis. KVTC and Finnfund will provide the Consultant with available background documentation, including previous studies, and KVTC will assist the Consultant in contacting the various stakeholders.

### **4. Required expertise and Budget**

The consultant is requested to propose a budget with detailed breakdown of number of working days and daily fees for consultants, and travel expenses. Successful conduct of this study is deemed to have a team with 1) experience in conducting socio-economic studies in rural Tanzania and full command of Kiswahili; 2) experience in working with private sector companies; and 3) preferably experience and knowledge of forestry and forest industry.



## Annex 2: KVTC Employees Questionnaire for Socio-Economic Impact of KVTC

### INTRODUCTION

Good morning/afternoon. My name is \_\_\_\_\_ from NIRAS that has been contracted by FinnFund to undertake Socio-Economic Impact of Kilombero Valley Teak Company. You have been selected to participate in this study since you have worked directly/indirectly in the company. We value your views that will provide us with information on whether the company has positively/negatively impacted the local communities in Kilombero. In the interview, we'd like to know all the changes recorded after 2012. For ease of memory recall, we may refer to key events such as the 2015 general election, or any other event that will apply to your context.

This interview will take not more than 40 minutes. All responses will be kept confidential and at no point will your name/personal details be mentioned in the final evaluation report.

CONSENT: Are you willing to participate in this interview? YES [ ] NO [ ]. If yes, proceed. If no, thank the respondent and terminate the interview.

---

### DEMOGRAPHICS/ PERSONAL DATA

- 1) What is your full name? \_\_\_\_\_ include:
- (i) Gender of the employee: 1. Male [ ] 2. Female [ ]
- (ii) Marital status 1. married [ ] 2. Single [ ] 3. Widowed [ ] 4. Divorced [ ]
- (iii) Highest level of education : 1. No Education [ ] 2. Primary [ ] 3. Secondary [ ] 4. College [ ]
- (iv) Age: 1. 18-25 years [ ] 2. 26-35 years [ ] 3. 36-45 years [ ] 4. 46 years and above [ ]
- 2) From which village do you come from? .....
- 3) How many people including you live in your household?
- 4) How many people in your household are:
- i. Children aged < 5 years:
- ii. Going to school:
- iii. Is there any of your children in boarding school? Yes/No.. If yes,(a) how many \_\_\_\_\_ and (b) in which school/s?
- 5) For how long have you been employed in the KVTC?
- 6) What would you say is your role in the company? 1. Community liaison person [ ], 2. Technician [ ], 3. operations person [ ] 4. Other.....specify
- 7) What is your monthly income from KVTC? Tshs

### HOUSEHOLD WELFARE ANALYSIS

- 8) At the moment, what would you say are the main sources of income to your household? 1. sale of livestock [ ], 2. Farming [ ], 3. selling of livestock products [ ], 4. Business [ ] 5. Employment at KVTC [ ] 6. Other casual labour [ ]
- 9) Before the start of KVTC, what would you say were the main sources of income to your household? 1. sale of livestock [ ], 2. Farming [ ], 3. selling of livestock products [ ], 4. Business [ ] 5. Other casual employment [ ] 6. Hawking [ ] 7. Other... .....specify
- 10) What would you say is the CURRENT average monthly household income from all sources of livelihoods?  
Tshs
- 11) What would you say was the average household monthly income from all sources of livelihoods BEFORE KVTC?  
Tshs

12) Among all sources of income listed above, which one would you say gives you the highest income? 1. sale of livestock [ ], 2. Farming [ ], 3. selling of livestock products [ ], 4. Business [ ] 5. Employment at KVTC [ ] 6. Other casual employment [ ] (state the estimated amount from this source)

13) Looking back at your household between now and before 2012, would you say the well-being of your house-hold has: 1. Improved [ ], 2. remained the same [ ] or 3. got worse [ ]?

14) (i) If there are improvements in your life/household, what would you say got better? 1. Ability to take children to school [ ] 2. Afford better meals [ ] 3. Build better house [ ] ,4. afford better health care [ ] 5. Other

(ii) What would you say were the greatest contributors to the improvements in your life? 1. Income from KVTC [ ], 2. jobs from other sources [ ], 3. new sources of income [ ], 4. donations from NGOs [ ] 5. Other [ ]

15) (i) If your life got worse/or remained the same, what would you say has changed?

(ii) What do you say were the greatest contributors/factors that made your life worse? 1. Farmers-pastoral conflicts [ ] 2. loss of livelihood [ ], 3. drought [ ] 4. Illness of family member [ ]

16) Since you got employed in the KVTC, were you able to;

i. Build a new house? Yes/No... if yes,

- How much did it cost you, Tshs.....

- What was the source of funds 1. Income from KVTC [ ], 2. Business [ ], 3. savings [ ],

4. Remittances [ ] 5. Support from other NGOs [ ] 6. Government [ ] 7. Other [ ]

ii. Buy household assets i.e TV, radio etc? Yes/No... if yes,

- Which assets.....

- How much did it cost you per each asset? Tshs.....

- What was the source of funds 1. Income from KVTC [ ], 2. Business [ ], 3. savings [ ],

4. Remittances [ ] 5. Support from other NGOs [ ] 6. Government [ ] 7. Other [ ]

iii. Buy livestock? Yes/No... if yes,

- Specify the livestock and number purchased.....

- How much did it cost you.....

- What was the source of funds 1. Income from KVTC [ ], 2. Business [ ], 3. savings [ ],

4. Remittances [ ] 5. Support from other NGOs [ ] 6. Government [ ] 7. Other [ ]

iv. Start a business? Yes/No... if yes,

- Specify the type of business.....

- How much did it cost you Tshs.....

- What was the source of funds 1. Income from KVTC [ ], 2. Business [ ], 3. savings [ ],

4. Remittances [ ] 5. Support from other NGOs [ ] 6. Government [ ] 7. Other [ ]

v. Take your children to school? Yes/No... if yes,

- How many children.....

- How much is the school fees Tshs.....

- What was the source of funds 1. Income from KVTC [ ], 2. Business [ ], 3. savings [ ],

4. Remittances [ ] 5. Support from other NGOs [ ] 6. Government [ ] 7. Other [ ]

17) Are/were there days your children used not to go to school or were sent out of school due to school fees? Yes/No.

Specify how many times;

- Now:

- Before you got employed by the KVTC:

18) How many livestock do you own now and how many did you own before getting employed by KVTC?

<i>Animals</i>	<i>Amount Owned now</i>	<i>Amount Owned before employed by KVTC</i>
Cows		
Goats		
Sheep		
Others (specify)		

19) Which of these household assets do you own now and which ones did you own before getting employed by KVTC?

<i>Animals</i>	<i>Owned now</i>	<i>Owned before been employed by KVTC</i>
Mobile phone		
TV		
Radio		
Bicycle		
Motorcycle		
Vehicle		
Solar panel		
Gas cooker		
Cooking Stove		
Others.....(Specify)		

20) What is the main source of lighting in your household? Specify what you use now and the situation before been employed by the KVTC?

<i>Source of lighting</i>	<i>Used now</i>	<i>Used before KVTC</i>
Solar		
Electricity		
Lantern lamp		
Kerosene		
Other....specify		

21) House: (1) Build/bought and own a houses, (2) Rent accommodation in neighbouring villages (3) Rent accommodation in neighbouring villages but have a permanent house.

22) What is the main source of cooking energy in your household? Specify what you use now and the situation before the KVTC?

<i>Source of cooking energy</i>	<i>Used now</i>	<i>Used before KVTC</i>
Firewood		
Gas		
Bio-gas		

Charcoal		
Kerosene		
Other....specify		

23) How much in a month do you spend to buy kerosene now and how much did you spend before KVTC?

- Now:
- 2012 back:

24) How much in a month do you spend to pay electricity now and how much did you spend before KVTC?

- Now:
- 2012 back:

25) If owned a house, What is the main roofing material of your house now/ before KVTC?

<i>Roofing material</i>	<i>Used now</i>	<i>before KVTC</i>
Grass		
Iron sheets		
Other....specify		

26) If owned a house, what is the main floor material of your house now/ before KVTC?

<i>Floor material</i>	<i>Used now</i>	<i>Before KVTC</i>
Mud		
Cow dung		
Cement		
Tiles		
Other (specify)		

### HOUSEHOLD FOOD SECURITY ANALYSIS

27) Do you sometimes/or your household go without food due to lack of money? Yes/No...

28) Looking back before you got employed with KVTC, were there days in a week that your household slept hungry due to lack of money? Yes/No...

29) How many days in a week does/did your household go without food due to lack of money? Specify number of days

- Now:
- Before you got employed by KVTC:

30) Looking back between now and before you got employed on the KVTC, would you consider your household to be food secure/insecure?

- Now: (Food secure/ Insecure)
- Before you got employed by KVTC: (Food secure/ Insecure)

31) Which of these meals do you consume now/ before you got employed by KVTC on a weekly basis?

<i>Meals</i>	<i>Con- sumed now</i>	<i>Consumed before employed by KVTC</i>
Meat		

Fish		
Fruits		
Vegetables		
Bread		
Bananas		
Rice		
Milk		

### ACCESS TO WATER

32) What is the main source of water used in your household? Specify the source now and the situation before KVTC?

<i>Source of water</i>	<i>Source-NOW</i>	<i>Source before KVTC</i>
Borehole		
River		
Dam		
Piped water		
Rain water		
Other.... Specify		

33) How far away (in km) is the nearest water point around your community and how does that compare with the situation the situation before KVTC establishment?

- Now:                      km
- 2012 back:              km

34) How long (hours) does it take you to reach the nearest water point and how does that compare with the situation before establishment of KVTC?

- Now:
- 2012 back:

### ACCESS TO HEALTH CARE SERVICES & MARKETS

35) From where do you / or your family get medical services now and how does that compare with the situation before 2012?

- Now                                      (Government hospital, private clinic/s, hospital built by KVTC, herbal ist/traditional health service providers)
- Before 2012:                      (Government hospital, private clinic/s, herbalist/traditional health service providers)

36) How far away (kms) is the nearest health facility around your community and how does that compare with the situation before 2012?

- Now:                                      kms
- Before 2012:                      kms

37) How long does it take you to reach the nearest health facility (hours)? How does that compare before establishment of KVTC?

- Now

- 2012

38) What means do you use to access the nearest health facility and how does that compare before KVTC establishment?

- Now (walk, motorcycle, public transport etc.)
- Before 2012

39) How much do you pay on transport to reach the nearest health facility? How does that compare before 2012?

- Now
- 2012

40) Has any of your family members/or those around your community suffered water borne-related diseases in the last 2 years? Yes/No

41) Before KVTC project began (in 2012), did any of your family members/or community around your area ever suffered from water-borne related diseases? Yes/No

4

<i>Diseases</i>	<i>Attack in the last 2 yrs</i>	<i>Attacks before KVTC establishment</i>
Malaria		
Typhoid		
UTI		
Bilharzia		
Other...specify		
None		

43) How long does it take you to reach the nearest market center? How does that compare with before KVTC establishment?

- Now
- 2012 back

44) How much do you pay on transport to reach the nearest market center? How does that compare with the situation before KVTC establishment?

- Now
- 2012 back

45) In your opinion, do you feel the conditions of the road/s has improved, remained the same or got worse over since year 2012? Improved/remained the same/got worse Explain your answer

46) Looking back between now and 2012 back, how easy or difficult is it to move from one area to the other within the district?

- Now (Very easy/ Very difficult)..explain
- 2012 back (Very easy/ Very difficult)..explain

#### FINANCIAL/ NON-FINANCIAL SERVICES USAGE/ GENERAL OPINIONS

47) Which of these financial instruments/ services do you use now and which ones did you before 2012?

<i>Instrument</i>	<i>Used-NOW</i>	<i>2012 back</i>
Bank Account		
Savings account		

Saccos		
M-Pesa/tigo-pesa/halo-pesa etc		
Savings group		
Use internet		

48) What is the main mode of communication of the community around your area and how does that compare with the situation before 2012?

<i>Communication mode</i>	<i>Used-NOW</i>	<i>Used before 2012</i>
Phone call/text		
Village leaders		
WhatsApp		
Other specify		

49) In your view, do you feel business activities around your area have increased since 2012? Yes/ No... Explain your response

50) In your own opinion/view, do you feel security around your community has improved? Yes/No.

51) Between now and 2012, how frequently in a month did the communities around your area experience; (Very frequent, frequent, rarely, none)

<i>Event</i>	<i>Frequency NOW</i>	<i>Before KVTC</i>
Thieves/burglars/pickpockets/robbery		
Farmers-pastoral conflicts		
Killings		
Conflicts caused by water scarcity		

52) In your own opinion/view, what do you feel about KVTC has been able to do well, particularly those that touch on the communities around you? Explore; employment, water provision, constructing schools/hospitals etc

53) In your own opinion/view, what do you feel KVTC has NOT been able to do well, particularly those touch on the communities around you?

## Annex 3: Household Questionnaire for Socio-Economic Impact of KVTC

### INTRODUCTION

Good morning/afternoon. My name is \_\_\_\_\_ from NIRAS that has been contracted by FinnFund to undertake Socio-Economic Impact of Kilombero Valley Teak Company. You have been selected to participate in this study since you have worked directly/indirectly in the company. We value your views that will provide us with information on whether the company has positively/negatively impacted the local communities in Kilombero. In the interview, we'd like to know all the changes recorded after 2012. For ease of memory recall, we may refer to key events such as the 2015 general election, el-nino occurrence, or any other event that will be applicable to your context.

This interview will take not more than 40 minutes. All responses will be kept confidential and at no point will your name/personal details be mentioned in the final evaluation report.

CONSENT: Are you willing to participate in this interview? YES  NO . If yes, proceed. If no, thank the respondent and terminate the interview. \_\_\_\_\_

### DEMOGRAPHICS/ PERSONAL DATA

- 1) What is your name? \_\_\_\_\_ include:
  - (i) Gender of head of household: 1. Male  2. Female
  - (ii) Marital status of the head of household 1. married  2. Single  3. Widowed  4. Divorced
  - (iii) Highest level of education of the head of household: 1. No Education  2. Primary  3. Secondary  4. College
  - (iv) Age of the head of household: 1. 18-25 years  2. 26-35 years  3. 36-45 years  4. 46 years and above
- 2) Was the head of HH born in this village 1. Yes  2. No  if No where born .....
- 3) How many people including Head of household live in this household?
- 4) How many people in the household are:
  - i. Children aged < 5 years:
  - ii. Going to school:
  - iii. Is there any of your children in boarding school? Yes/No.. If yes,(a) how many and (b) in which school/s?
- 5) For how long have you lived in this village?
- 6) How much land do you have.....? Is the size of your land affected by KVTC activities
- 7) Do you have teak woodlot, 1. Yes  2. No . If yes what is the size of your woodlot.....ha.

### HOUSEHOLD WELFARE ANALYSIS

- 8) At the moment, what would you say are the main sources of income to your household? 1. sale of livestock , 2. Farming , 3. Teak growing and sell , 4. Business  5. Employment at KVTC  6. Other casual labour
- 9) Before the start of KVTC, what would you say were the main sources of income to your household? 1. sale of livestock , 2. Farming , 3. Teak farming and selling , 4. Business  5. Other casual employment  6. Hawking  7. Other...  
.....specify
- 10) What would you say is the CURRENT average monthly household income from all sources of livelihoods?  
Tshs
- 11) What would you say was the average household monthly income from all sources of livelihoods BEFORE KVTC? Tshs
- 12) Among all sources of income listed above, which one would you say gives you the highest income? 1. sale of livestock , 2. Farming , 3. Teak , 4. Business  5. Employment at KVTC  6. Other casual employment  (state the estimated amount from this source)



13) Looking back at your household between now and before 2012, would you say the well-being of your household has: 1. Improved [ ], 2. remained the same [ ] or 3. got worse [ ]?

14) (i) If there are improvements in your life/household, what would you say got better? 1. Ability to take children to school [ ] 2. Afford better meals [ ] 3. Build better house [ ], 4. afford better health care [ ] 5. Other

(ii) What would you say were the greatest contributors to the improvements in your household? 1. Teak production [ ], 2. jobs from other sources, mention..... [ ], 3. new sources of income [ ], 4. Remittances from relatives [ ] 5. Other [ ]

15) (i) If your life got worse/or remained the same, what would you say has changed?

(ii) What do you say were the greatest contributors/factors that made your life worse? 1. Farmers-pastoral conflicts [ ] 2. loss of livelihood due to KVTC activities [ ], 3. drought [ ] 4. Illness of family member [ ]

16) Since 2012, which of the following your household achieved;

i. Buildings

- Build new a house, how much costed you, Tshs.....
- What was the source of funds 1. Income from growing teak [ ], 2. Business [ ], 3. savings [ ], 4. Remittances [ ] 5. Support from other NGOs [ ] 6. Other [ ]

ii. Buy household assets i.e TV, radio etc? Yes/No... if yes,

- Which assets.....
- How much it cost you per each asset? Tshs.....
- What was the source of funds 1. Income from growing teak [ ], 2. Business [ ], 3. savings [ ], 4. Remittances [ ] 5. Support from other NGOs [ ] 6. Other [ ]

iii. Buy livestock? Yes/No... if yes,

- Specify the livestock and number purchased.....
- How much did it cost you.....
- What was the source of funds 1. Income from growing teak [ ], 2. Business [ ], 3. savings [ ], 4. Remittances [ ] 5. Support from other NGOs [ ] 6. Other [ ]

iv. Start a business? Yes/No... if yes,

- Specify the type of business.....
- How much did it cost you Tshs.....
- What was the source of funds 1. Income from growing teak [ ], 2. Business [ ], 3. savings [ ], 4. Remittances [ ] 5. Support from other NGOs [ ] 6. Other [ ]

v. Take your children to school? Yes/No... if yes,

- How many children.....
- How much is the school fees Tshs.....
- What was the source of funds 1. Income from growing teak [ ], 2. Business [ ], 3. savings [ ], 4. Remittances [ ] 5. Support from other NGOs [ ] 6. Other [ ]

17) Are/were there days your children used not to go to school or were sent out of school due to school fees? Yes/No. Specify how many times;

- Now:
- Before you started teak activities:

18) How many livestock do you own now and how many did you own before engaged with teak growing?

<i>Animals</i>	<i>Amount Owned now</i>	<i>Amount Owned before engaged with teak growing</i>
Cows		
Goats		

Sheep		
Poultry		
Others (specify)		

19) Which of these household assets do you own now and which ones did you own before start growing teak?

<i>Animals</i>	<i>Owned now</i>	<i>Owned before teak growing</i>
Mobile phone		
TV		
Radio		
Bicycle		
Motorcycle		
Vehicle		
Solar panel		
Gas cooker		
Cooking Stove		
Others.....(Specify)		

20) What is the main source of lighting in your household? Specify what you use now and the situation before been employed by the KVTC teak growing?

<i>Source of lighting</i>	<i>Used now</i>	<i>Used before teak growing</i>
Solar		
Electricity		
Lantern lamp		
Kerosene		
Other....specify		

21) What is the main source of cooking energy in your household? Specify what you use now and the situation before teak growing?

<i>Source of cooking energy</i>	<i>Used now</i>	<i>Used before teak growing</i>
Firewood		
Gas		
Bio-gas		
Charcoal		
Kerosene		
Other....specify		

22) How much in a month do you spend to buy kerosene now and how much did you spend before teak growing?

- Now:
- 2012 back:

23) How much in a month do you spend to pay electricity now and how much did you spend before teak growing?

- Now:

• 2012 back:

24) What is the main roofing material of your house now/ before teak production?

<i>Roofing material</i>	<i>Used now</i>	<i>before teak production</i>
Grass		
Iron sheets		
Other....specify		

25) What is the main floor material of your house now/ before teak production?

<i>Floor material</i>	<i>Used now</i>	<i>Before teak production</i>
Mud		
Cow dung		
Cement		
Tiles		
Other (specify)		

### HOUSEHOLD FOOD SECURITY ANALYSIS

26) Do your household sometimes go without meal due to lack of food? Yes/No...

27) Looking back before your household started teak production, were there days in a week that your household slept hungry due to lack of food? Yes/No...

28) How many days in a week does your household go without food due to lack of food? Specify number of days

• Now:

• Before you started producing teak:

29) Looking back between now and before your household started producing teak, would you consider your household to be food secure/insecure?

• Now: (Food secure/ Insecure)

• Before started teak production:(Food secure/ Insecure)

30) Which of these meals do you consume now/ before your household started teak production on a weekly basis?

<i>Meals</i>	<i>Consumed now</i>	<i>Consumed before started teak production</i>
Meat		
Fish		
Fruits		
Vegetables		
Bread		
Bananas		
Rice		
Milk		

### ACCESS TO WATER

31) What is the main source of water used in your household? Specify the source now and the situation before KVTC?

<i>Source of water</i>	<i>Source-NOW</i>	<i>Source before KVTC</i>
Borehole		
River		
Dam		
Piped water		
Rain water		
Other.... Specify		

32) How far away (in km) is the nearest water point from your household and how does that compare with the situation before KVTC establishment?

- Now:            km
- 2012 back:    km

33) How long (hours) does it take you to reach the nearest water point and how does that compare with the situation before establishment of KVTC?

- Now:
- 2012 back:

#### **ACCESS TO HEALTH CARE SERVICES & MARKETS**

34) Where is your household getting medical services now and how does that compare with the situation before 2012?

- Now( Government hospital, private clinic/s, hospital built by KVTC, herbal ist/traditional health service providers)
- Before 2012: (Government hospital, private clinic/s, herbalist/traditional health service providers)

35) How far away (km) is the nearest health facility around your community and how does that compare with the situation before 2012?

- Now:            km
- Before 2012: km

36) How long does it take you to reach the nearest health facility (hours)? How does that compare before establishment of KVTC?

- Now
- 2012

37) What means do you use to access the nearest health facility and how does that compare before KVTC establishment?

- Now            (walk, motorcycle, public transport etc.)
- Before 2012

38) How much do you pay on transport to reach the nearest health facility? How does that compare before 2012?

- Now
- 2012

39) Has any of your household member suffered water borne-related diseases in the last 2 years? Yes/No

40) Before 2012, did any of your household members suffered from water-borne related diseases? Yes/No

41) Which of these diseases did household member/s suffered from in the recent 2 years

<i>Diseases</i>	<i>Attack in the last 2 yrs</i>	<i>Attacks before2012</i>
Malaria		
UTI		
Typhoid		
Bilharzia		
Other...specify		

None		
------	--	--

42) How long does it take you to reach the nearest market center? How does that compare with before KVTC establishment?

- Now
- 2012 back

43) How much do you pay on transport to reach the nearest market center? How does that compare with the situation before KVTC establishment?

- Now
- 2012 back

44) In your opinion, do you feel the conditions of the road/s has improved, remained the same or got worse over since year 2012? Improved/remained the same/got worse Explain your answer

45) Looking back between now and 2012 back, how easy or difficult is it to move from one area to the other within the district?

- Now (Very easy/ Very difficult)..explain
- 2012 back (Very easy/ Very difficult)..explain

#### FINANCIAL/ NON-FINANCIAL SERVICES USAGE/ GENERAL OPINIONS

46) Which of these financial instruments/ services do you use now and which ones did you use before 2012?

<i>Instrument</i>	<i>Used-NOW</i>	<i>2012 back</i>
Bank Account		
Savings account		
Saccos		
M-Pesa/tigo-pesa/halo-pesa etc		
Savings group		
Use internet		

47) What is the main mode of communication of the community around your area and how does that compare with the situation before 2012?

<i>Communication mode</i>	<i>Used-NOW</i>	<i>Used before 2012</i>
Phone call/text		
Village leaders		
WhatsApp		
Other specify		

48) In your view, do you feel business activities around your area have increased since 2012? Yes/ No... Explain your response

49) In your own opinion/view, do you feel security around your community has improved? Yes/No.

50) Between now and 2012, how frequent in a month did the communities around your area experience; (Very frequent, frequent, rarely, none)

<i>Event</i>	<i>Frequency NOW</i>	<i>Before KVTC</i>
Thieves/burglars/pickpockets/robbery		
Farmers-pastoral conflicts		
Killings		
Conflicts caused by water scarcity		

51) In your own opinion/view, what do you feel about KVTC has been able to do well, particularly those that touch on your household? Explore; employment, water provision, constructing schools/hospitals etc

52) In your own opinion/view, what do you feel KVTC has NOT been able to do well, particularly those touch on the communities around you?

## Annex 4: Checklist to Guide KII

### INTRODUCTION

NIRAS has been contracted by FinnFund to undertake Socio-Economic Impact study of the KVTC. You have been selected to participate in the evaluation process as a key informant, having worked/ resided in the area for a while. We value your honest opinion on what you feel have been the most significant changes in the region and what you feel have been the contributing factors. All information provided by you shall be kept confidential.

THANK YOU.

Name: \_\_\_\_\_ Position: \_\_\_\_\_ Tel: \_\_\_\_\_

**KII Education Sector: Name \_\_\_\_\_ Position: \_\_\_\_\_ Institution \_\_\_\_\_**

1. How has access to education evolved over time in the KVTC impacted area?
2. Has there been an increase in school enrolment since 2012?
3. How many pupils/ students are currently enrolled in the school and how does that compare with the enrolment rates back in 2012?
4. If there has been an increase in school enrolment, what would you say are the main factors that have contributed to this?
5. Has there been an increase in girls' enrolment in the schools around the area? Explain the contributing factors to the increased enrolment
6. Since 2012, has there been a change in the student' enrolment and completion rates? Explain how many students are enrolled in the school and how many complete the final level/ examination?
7. How has the academic performance of the school changed since 2012? Explain the mean grades in the most result results and the year 2012. Has there been a change in the performance of science courses? Explain
8. What has been the role of KVTC towards enhancing the education sector in the region?
9. What would you say have been the impacts of KVTC 's contributions to the education sector in the district?

**KII Health Sector (and water): Name \_\_\_\_\_ Position: \_\_\_\_\_ Institution \_\_\_\_\_**

1. How has access to health services in the area evolved over time?
2. Do we see many people attending hospitals as opposed to traditional health care service providers?
3. Has there been a *reduction* in child mortalities/ maternal deaths since 2012; (Give examples of the significant changes)?
4. Has there been a change in hospital deliveries as opposed to home deliveries? Explain
5. What has been the role of KVTC towards enhancing the health sector in the region?
6. What would you say have been the impacts of KVTC's contributions to the health sector in the region?
7. How has access to water changed over time? From where did the communities get water 10 years back and how has that changed over time?
8. Have you recorded cases/ incidences of water borne related diseases at the health facility in the last 2 years? How were the disease incidences 10 years back? Explain
9. What has been the role of KVTC towards enhancing water access in the region?

---

10. What would you say have been the impacts of KVTC 's contributions to the water sector in the region?



## Annex 5: Focus Group Discussion Guide

### FGD Questions

1. What are the main economic activities of the area?
2. How have the economic activities within the area evolved over time? i.e have we seen people diversifying into other livelihood options over the last 10 years? *Yes/ No*. If there has been diversification in livelihood options, which ones and what would you say have been the contributing factors?
3. Comparing the area between now and 10 years back, would you say there has been improvement in the road network and general accessibility of the area? *Explain conditions of the roads before (provide examples how hard or easy it was/ has been to move from one location to the other) ...which development partners have been key in the roads improvement initiatives?*
4. What have been the major changes in the transport system in the area? *Explain (what were the main means of transport 10 years back, were the transport systems reliable, how many vehicles could access the town(s), how much was the bus fare and how has that changed over time?)*
5. Have we seen emergence of new/expansion of existing business activities in the area (*Explain the main contributing factors to the new business activities*)
6. Has there been any shifts in the prices of commodities, particularly livestock over the last 10 years? *Explain the price shifts and the possible causes.*
7. How has the telecommunication network evolved in the area over the last 10 years? (*Do we see many people using mobile phones, Mpesa services etc*). What would you say are the contributing factors?
8. How has the banking industry evolved in the area over the last 10 years? *Do we see banks opening branches, people using bank accounts etc...* What would you say are the contributing factors?
9. How has the security in the area changed over time? (*Give examples of inter-ethnic conflicts, conflicts due to access to water points, cattle rustling etc.*)
10. In your view, what do you think have been the greatest contributions of KVTC to the communities around the area? *Provide relevant examples*
11. In your view, do you feel there have been negatives consequences of KVTC to the communities around your area? *Provide examples*

## Annex 6: List of Documents reviewed

- KVTC Environmental Social and Governance Monitoring Report (2018-2022)
- KVTC 25 years of Impact Creating value, Conserving forests
- Kilombero Valley Teak Company (KVTC) Community Voices Final Report including recommendations from three surveys conducted in late 2011 and early 2012
- Schreiner (2016). Simple Poverty Scorecard® Poverty-Assessment Tool Tanzania, [https://www.simplepoverty-scorecard.com/TZA\\_2011\\_ENG.pdf](https://www.simplepoverty-scorecard.com/TZA_2011_ENG.pdf)
- Smith, S., Anker, R., Anker, M. and Prates, I. (2020). Anker Living Income Reference Value: Rural Tanzania 2020, <https://www.globallivingwage.org/wp-content/uploads/2020/08/Rural-Tanzania-LI-Reference-Value-.pdf>
- SGS. Forest Management Controlled Wood Certification Report (2016-10-07)
- KVTC Final Report including recommendations from three surveys conducted in late 2011 and early 2012
- KVTC contractor and their Employees
- KVTC Training Program 2012-2022
- KVTC Government Social Payment
- KVTC Outgrower Program Evolution
- KVTC HR Data 2012-2022
- KVTC OSP payment 2012-2022
- KVTC ESG data
- Key Metrics from Rapsa
- National Bureau of Statistics (2020) Morogoro Region Socio-Economic Profile, 2020. National Bureau of Statistics, Ministry of Finance and Planning and Morogoro Regional Secretariat
- URT (2020). Tanzania Mainland Household Budget Survey of 2017/2018, Final Report
- Tumaini, U. and Msuya, J. (2016). Household Food Access Insecurity along the Urban-Rural Continuum in Morogoro and Iringa, Tanzania, *Developing Country Studies* 6 (8) [www.iiste.org](http://www.iiste.org), ISSN 2224-607X (Paper) ISSN 2225-0565 (Online)

## Annex 7 a: Simple Poverty Scorecard® Poverty-Assessment Tool

Interview ID: \_\_\_\_\_

Number of household members: \_\_\_\_\_

Indicator	Response	Points	Score
1. How many household members are 18-years-old or younger?	A. Six or more	0	
	B. Five	2	
	C. Four	5	
	D. Three	11	
	E. Two	14	
	F. One	17	
	G. None	28	
2. Are all household members ages 6 to 18 currently in school?	A. No	0	
	B. Yes	3	
	C. No members ages 6 to 18	5	
3. What is the main building material used for the walls?	A. Burnt bricks	0	
	B. Poles and mud or other	6	
	C. Cement bricks	13	
4. What is the main building material used for the roof?	A. Thatching and mud, or other	0	
	B. Iron sheets, concrete, or Asbestos	6	
5. What is the main fuel used for cooking?	A. Firewood, wood/farm residuals, or animal residuals	0	
	B. Charcoal, paraffin, gas (industrial), electricity, generator/private source, or other	9	
6. Does your household have any televisions?	A. No	0	
7. Does your household have any radios, cassette/tape recorders, or hi-fi systems?	B. Yes	15	
	A. No	0	
8. Does your household have any lanterns?	B. Yes	4	
	A. No	0	
9. Does your household have any tables?	B. Yes	4	
	A. No	0	
10. If the Crops and livestock	B. Yes	4	
	A. No crops, and no cattle	0	
	B. Crops, but no cattle	5	

---

Adopted from: Schreiner (2016). Simple Poverty Scorecard® Poverty-Assessment Tool Tanzania, [https://www.simplepovertyscorecard.com/TZA\\_2011\\_ENG.pdf](https://www.simplepovertyscorecard.com/TZA_2011_ENG.pdf)

Annex 7a: A table used to convert scores to poverty likelihood

**Poverty likelihood (%)** PPP poverty lines

<b>Score</b>	<b>2005 PPP poverty lines</b>				<b>2011 PPP poverty lines</b>			
	<b>\$1.25</b>	<b>\$2.00</b>	<b>\$2.50</b>	<b>\$5.00</b>	<b>\$1.90</b>	<b>\$3.10</b>	<b>\$3.80</b>	<b>\$4.00</b>
0–4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
5–9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
10–14	86.7	100.0	100.0	100.0	89.0	100.0	100.0	100.0
15–19	77.5	99.9	99.9	100.0	85.0	99.9	99.9	99.9
20–24	71.9	93.0	97.0	99.7	78.0	96.3	97.4	98.3
25–29	59.6	92.4	96.7	99.5	70.6	94.5	97.4	98.0
30–34	48.0	84.3	95.0	99.5	57.7	91.7	96.7	97.7
35–39	35.2	77.2	89.5	99.5	47.2	84.4	92.5	94.1
40–44	23.5	64.3	79.6	98.5	31.2	71.8	85.4	88.9
45–49	20.2	54.3	75.7	97.3	28.5	66.1	81.8	84.1
50–54	13.8	45.4	61.2	94.2	18.8	54.0	69.7	72.2
55–59	7.3	38.7	56.9	93.4	11.9	45.5	63.1	65.3
60–64	4.2	25.1	45.6	86.1	5.8	33.7	50.2	53.8
65–69	1.7	21.3	36.8	79.9	3.7	28.9	44.7	46.8
70–74	1.7	13.8	27.1	78.7	3.1	21.2	34.4	37.2
75–79	1.7	12.8	23.2	71.3	2.9	20.1	33.0	35.7
80–84	1.3	3.1	8.1	44.2	1.3	6.3	11.4	13.4
85–89	0.1	2.8	8.1	38.3	1.2	6.3	11.4	13.4
90–94	0.0	0.0	7.6	30.6	0.0	6.3	7.6	7.6
95–100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0